

**GENERAL SEMANTICS:
An Outline Survey**

by

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About this 3rd Edition

Kenneth G. Johnson wrote *General Semantics: An Outline Survey* in 1960. The International Society for General Semantics issued a 2nd Edition in 1972 that resulted in three printings. The Institute of General Semantics, whom Ken served as both a seminar lecturer and Trustee for over thirty years, is now pleased to make this 3rd revised edition available to a new generation of students and teachers of general semantics.

Notable changes in this edition include:

1. Andrea Johnson and Gregg Hoffmann, former students of Ken and university teachers of general semantics themselves, have each contributed personal comments about their experiences with Ken.
2. The original outline scheme using Roman numerals, letters and numbers has been replaced with a numerical scheme more commonly used today.
3. The Bibliography has been expanded to include a number of books published since 1972. These additional listings follow the Bibliography as it was printed in 1972. Books preceded by an "*" indicate they are available for purchase through the Institute of General Semantics.
4. Attributions for quotations, where available, have been summarized in a numbered list following the Bibliography. If no number inside of [brackets] is given following the name, no specific source was provided.
5. Except within direct quotations and certain examples, gender-specific references have been replaced.
6. Certain text that contained obviously dated terms, examples, and references has been updated.
7. The diagram of the structural differential and short explanation by Charlotte S. Read has been added to Section 18.0.
8. The formatting scheme in this book uses:
 - a. "Double quotes" for direct quotations, dialog, or titles of published articles;
 - b. 'Single quotes' to denote terms that, from a general semantics perspective, should be more carefully and perhaps tentatively evaluated; and to denote direct quotes within direct quotations;
 - c. *Italics* for titles of books and to refer to specific words or terms as the subject of interest;
 - d. **Bold face** for major topic headings and for emphasis.

I want to thank Gregg Hoffmann, Andrea Johnson, Martin H. Levinson, Ph.D., and Kate Gladstone for their valuable contributions to this revised edition of Ken's book, and to Ken's wife Carol for her approval, encouragement, and inspiration.

Steve Stockdale, Editor
Executive Director
Institute of General Semantics
August, 2004

As we think, so we speak; as we speak, so we think.

— Lister Sinclair, "A Word in Your Ear"

GENERAL SEMANTICS: An Outline Survey

1.0 Humans differs from other animals in that we can create, innovate and communicate across time through symbols.

- 1.1 Language is often ranked as the most remarkable creation of human beings. Our ability to symbolize, in turn, opens to us a variety of ways to create.
- 1.2 We can 'freeze' experience and products of our creativity in the form of language then 'unfreeze' them later; in this way, we can use minds and nervous systems miles and centuries away. One generation can begin where the previous generation left off. Alfred Korzybski referred to this unique ability as *time-binding* and therefore classified humans as *time-binders*.
- 1.3 "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."
– Irving J. Lee ^[1]
- 1.4 "Man is thus his own greatest mystery. . . . He comprehends but little of his organic processes and even less of his unique capacity to perceive the world about him, to reason, and to dream. Least of all does he understand his noblest and most mysterious faculty: the ability to transcend himself and perceive himself in the act of perception."
– Lincoln Barnett ^[2]

2.0 When we discuss the nature and use of language, it is convenient to distinguish three areas of inquiry:

- 2.1 **Syntactics:** The study of relationships between words and other words, symbols and other symbols. Examples: logic, mathematics, grammar, dictionary definitions.
- 2.2 **Semantics:** The study of relationships between words and what they stand for. Examples: descriptions, operational definitions.
- 2.3 **Pragmatics:** The study of relationships of words and the users of words. Examples: evaluation, propaganda, usage, idiom.

3.0 General semantics (GS), formulated by Alfred Korzybski, is concerned to some degree with all three of the areas mentioned above, but it emphasizes relationships between language and human behavior. It utilizes our human ability to “transcend ourselves and perceive ourselves in the act of perception.”

3.1 “General semantics is not ‘the study of words’ or ‘the study of meaning,’ as these terms are ordinarily understood. It is more nearly correct to say that general semantics is concerned with the assumptions underlying symbol systems and the personal and cultural effects of their use. It is concerned with the pervasive problem of the relation of language to reality, of word to fact, of theory to description, and of description to data – of the observer to the observed, of the knower to the knowable. It is concerned with the role of language in relation to predictability and evaluation, and so in relation to the control of events and to personal adjustment and social integration.”

– Wendell Johnson ^[3]

3.2 “Here we come across a tremendous fact, namely, that a language, any language, has at its bottom certain metaphysics, which ascribe, consciously or unconsciously, some sort of structure to this world. . . .’ Neither Aristotle nor his immediate followers realized or could realize what has been said here. They took the structure of the primitive-made language for granted and went ahead formulating a philosophical grammar of this primitive language, which grammar – to our great semantic detriment – they called *logic*, defining it as the ‘laws of thought.’ Because of this formulation in a general theory, we are accustomed even today to inflict this ‘philosophical grammar’ of primitive language upon our children and so, from childhood up, imprison them unconsciously by the structure of the language and the so-called *logic*, in an anthropomorphic, structurally primitive universe. . . .

“We do not realize what tremendous power the structure of an habitual language has. It is not an exaggeration to say that it enslaves us through the mechanism of semantic reactions, and that the structure a language exhibits, and impresses upon us unconsciously, is automatically projected upon the world around us. . . .

“Now these structural assumptions and implications are inside our skin when we accept a language – any language. If unraveled, they become conscious; if not, they remain unconscious.”

– Alfred Korzybski ^[4]

4.0 Communication may be regarded as a game in which the speaker and listener (writer and reader) struggle against the possibilities of confusion.

4.1 We must expect to be misunderstood.

4.2 We must expect to misunderstand.

4.3 We can try to minimize misunderstanding; we cannot hope to eliminate it.

5.0 We can talk about two 'worlds.'

- 5.1 The world of things we touch, see, hear, or otherwise experience is called the *extensional* world.

"Experience cannot be transmitted as **experience**: it must first be translated into something else. It is this something else that is transmitted. When it is 'received' it is translated back into something that resembles experience."

– Anatol Rapoport ^[5]

- 5.2 The world of words – our verbal world – contains verbal 'crystallizations' of our experience and models built of the words we read and hear.

- 5.3 "As words are not the objects they represent, structure – and structure alone – becomes the only link that connects our verbal processes with the empirical data."

– Alfred Korzybski ^[4]

- 5.4 The verbal world may be considered a map of the extensional world.

5.4.1 A good map has a structure similar to the territory; it has prediction value.

5.4.2 Because of the **structure** of our language, it is difficult to make verbal maps that do not, to some degree, distort the territory of the extensional world.

5.4.3 It is not so much the distortions in a verbal map that cause trouble, but our **ignorance of them**. (A map using a Mercator projection shows tremendous distortion away from the equator, yet it can be useful if its limitations are recognized.)

5.4.4 Adjustment to the world about us, and in some cases survival, depends upon having adequate 'maps' of the 'territories' we encounter.

- 5.5 Like any model used to represent something other than itself, language 'fits' better in some places than in others, but at no place is there a perfect correspondence between language and the world 'out there.'

- 5.6 "Reasoning by strict logic is something like an accurate reading of a map. It will help us arrive at correct conclusions about the territory if the map correctly represents the territory, but not otherwise."

– Anatol Rapoport ^[5]

- 5.7 "The worlds we manage to get inside our heads are mostly worlds of words."

– Wendell Johnson ^[6]

6.0 Data about the world 'out there' come to us through our senses. Internal senses keep us aware of some of the things that go on 'inside.'

- 6.1 Our senses are amazingly sensitive, yet severely limited. 'Narrow band' reception of all our senses means that much of what is going on we cannot sense at all.
 - 6.1.1 Microwave signals, cellular phone signals, radio, TV, ultra-high-frequency sounds, ultraviolet light, etc.
 - 6.1.2 Color blindness, blind spots, optical illusions, etc.
 - 6.1.3 Effects of fatigue
 - 6.1.4 Changes in sensitivity as sense organs adapt to conditions
 - 6.1.5 In terms of information theory, the eye can handle something like five million bits per second, but the resolving power of the brain is about 500 bits per second. The nervous system **must** select, discriminate.
- 6.2 Individuals vary considerably in the way they sense things.
 - 6.2.1 Importance of a "to me" attitude
 - 6.2.2 Danger of assumptions concerning what others see, hear, smell, etc.
- 6.3 We more readily perceive the objects and the relationships for which we have names. (See 8.2)

7.0 We see things only as they are interpreted by our nervous systems.

- 7.1 'Seeing' goes on inside our heads or inside our nervous systems. What we **look at** is outside our nervous systems and may be regarded as a stimulus. What we '**see,**' then, may be considered a nervous system response to what we look at.
- 7.2 We do not talk about an objective world 'out there'; we can only talk about the *world-to-me* or the *world-to-you*.
 - 7.2.1 When we try to be 'objective,' we talk about the reactions of our sense organs. But even an 'objective' report involves a unique human nervous system with its peculiarities, unique experiences, language forms, etc. It would be more accurate to talk about **degrees** of objectivity.
 - 7.2.2 When we are being 'subjective,' we talk about our thoughts, feelings, etc., about the reactions of our sense organs.
- 7.3 "We see the world as 'we are,' not as 'it is,' because it's the 'eye' behind the 'I' that does the seeing."

— Anais Nin

- 7.4 Things don't 'have' meaning; our nervous systems manufacture meanings from the raw data collected by our sense organs.
- 7.4.1 "You don't get meaning, you respond with meaning."
– Charles Sanders Peirce ^[43]
- 7.4.2 "A man blind from birth who has his sight restored by an operation might be expected to gaze with wonder upon a world so long hidden from him. ('So that is what it looks like!') But he does nothing of the kind. He finds a bizarre patchwork of meaningless shapes and colors, having nothing whatever to do with the real world. He shuts his eyes, once again to feel and hear reality as he knows it. It may take years of patient training before he learns to see well, before he acquires habits that can be operated upon by visual signs, so that sights become a part of his 'real' world."
– Colin Cherry ^[7]
- 7.5 "The universe as we know it is a joint product of the observer and the observed."
– R. D. Carmichael
- 7.6 When we observe, we abstract – that is, we leave out things.
- 7.6.1 Our senses are limited. (See 6.1 above.)
- 7.6.2 "When we take in our surroundings, we select from them, not at random, but in accordance with our past experience and our purposes."
– Earl C. Kelley ^[8]
- 7.7 When we react to events or words, we think, feel, move, and undergo neurological and physiological changes. These reactions are so interwoven that we cannot separate them except through language. The terms *semantic reaction* or *evaluative reaction* are used to refer to the **total** reaction of a person to a stimulus or event.
- "When you think hard, you become tense; when you are emotionally upset, your thinking goes awry; when you are given an anesthetic, you stop thinking and moving; worries often cause ulcers; insulin-shocks clear up the confused thinking of some patients. . . . Man is an organism that works as a whole."
– J. Samuel Bois ^[9]
- 8.0 The structure of our language influences not only the way we communicate with others, but also the way we communicate with ourselves.**
- 8.1 "It is not only true that the language we use puts words in our mouths; it also puts notions in our heads."
– Wendell Johnson ^[6]
- 8.2 "And every language is a vast pattern-system, different from others, in which is culturally ordained the forms and categories by which the personality not only

communicates, but analyzes nature, notices or neglects types of relationships and phenomena, channels his reasoning, and builds the house of his consciousness. Each language performs this artificial chopping up of the continuous spread and flow of existence in a different way.”

– Benjamin Lee Whorf^[10]

Language patterns do not inescapably limit perceptions and thought, but, along with other cultural patterns, they direct perceptions and thinking into certain habitual channels.

- 8.3 “Human beings do not live in the objective world alone, nor alone in the world of social activity as ordinarily understood, but are very much at the mercy of the particular language which has become the medium of expression for their society. It is quite an illusion to imagine that one adjusts to reality essentially without the use of language and that language is merely an incidental means of solving specific problems of communication or reflection. 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

- 8.4 Many of the structural characteristics of language that lead us astray are ‘obvious’ when we stop to think about them. Too often we do not stop to think, and the structure of our language operates as a hidden assumption about the structure of the world.

- 8.4.1 “Nor do we realize how grammar warps our ‘thinking.’ When we make sentences, we force symbols (words) into certain set relationships. Yet the things these symbols represent often have quite different relationships. This happens because our grammar preserves many ancient wrong guesses about the world we live in, such as:

similar things may be treated as identical;
the ‘essences’ of things never change;
parts may be considered without relation to the whole;
qualities are the properties of ‘things’;
an event has a ‘cause.’

“Such notions once fit man’s knowledge of the world. But our century has seen the birth of the relativity theory and atomic fission. Today, primitive language habits serve only to widen the frightening chasm between our lagging civilization and our leaping technology.”

– International Society for General Semantics

General Information Bulletin No. 6

- 8.4.2 “There is a tremendous difference between ‘thinking’ in verbal terms and ‘contemplating,’ inwardly silent, on nonverbal levels and then searching

for the proper structure of language to fit the supposedly discovered structure of the silent processes that modern science tries to find. If we 'think' verbally, we act as biased observers and project onto the silent levels the structure of the language we use and so remain in our rut of old orientations, making keen, unbiased observations and creative work well-nigh impossible. In contrast, when we 'think' without words, or in pictures (which involve structure and therefore relations), we may discover new aspects and relations on silent levels and so may produce important theoretical results in the general search for a similarity of structure between the two levels, silent and verbal. Practically all important advances are made that way."

– Alfred Korzybski ^[12]

8.4.3 "To achieve adjustment and sanity and the conditions that follow from them, we must study the structural characteristics of this [non-verbal] world *first* and, then only, build languages of similar structure, instead of habitually ascribing to the world the primitive structure of our language."

– Alfred Korzybski ^[4]

8.4.4 Wendell Johnson refers to "the thinking we do when we don't think about the thinking we do."

9.0 The structure of language encourages us to talk and think *as if* 'qualities' exist 'in' things. The structure of language obscures the role of the observer.

9.1 Consider the following sentences:

The rose is red.
This apple is sweet.
Mary is lazy.

9.1.1 We appear to be talking about a rose, an apple, and Mary. Yet the words *red*, *sweet*, and *lazy* refer to under-the-skin evaluations, not to what is 'out there.' All of these statements would be more accurate if followed by *to me*.

9.1.2 The word *is* used in this way is called the *is of predication* (or sometimes the *is of projection*). In this usage, we project our reactions into the world 'out there.'

9.2 The consequences of confusing *evaluations* with *descriptions* can be seen in extreme form in mental health facilities. Many of the people there confuse what is going on inside their nervous systems with what is going on outside. They 'see' things that other people do not see; they 'hear' voices that other people do not hear. (Not all hallucinations can be attributed to improper evaluation. Some studies have indicated that hallucinations may be produced by stimulating exposed areas of the cortex of patients undergoing brain surgery. Similar effects may be caused by brain damage, epileptic seizures, etc.)

10.0 The structure of our language permits us to say that a map 'equals' the territory.

10.1 In general semantics terms, equating a map with the territory is called *identification*.

What I say about something is what the something is.
What I say = what it is.

Look at the equation again in slightly different terms:

A set of words = something that is **not** words.

In this form we can more easily recognize that these two statements cannot be equal to or identical with each other.

10.2 Many people react to words as if they were things instead of symbols that stand for or point to things.

10.2.1 By naming proposed legislation as "The Patriot Act," how could a politician vote against it? Does opposing "The Patriot Act" mean that politicians and citizens are "not patriotic?"

10.2.2 **Talk** of details of a surgical operation upsets some people. **Talk** about snakes, spiders, etc., can have a similar effect. **Talk** about what a food *is* can affect how a person enjoys, or rejects, the food itself.

10.2.3 "To point at the moon a finger is needed, but woe to those who take the finger for the moon."
– Zen Buddhist saying.

11.0 Language compels us to emphasize similarities but permits us to ignore differences.

11.1 Scientists tell us that no two things are identical.

11.1.1 We see similarities by ignoring differences.

11.1.2 We can see similarities among different things, just as we can see differences among similar things.

11.1.3 We learn as children that "no two snowflakes are exactly alike," but we can state just as accurately say that "no two of anything are exactly alike."

11.1.4 "The action of putting things that are not identical into a group or class is so familiar that we forget how sweeping it is. The action depends on recognizing a set of things to be alike when they are not identical. . . . Habit makes us think the likeness obvious."

– Jacob Bronowski ^[13]

- 11.2 Except for proper nouns, we have no words for things that happen only once, for unique individuals, events, feelings, relationships. Instead, we speak in categories and learn to perceive and think that way.
- 11.3 The categories that we use are not 'out there' in the 'real world'; these categories are created in our heads and expressed in our language.
- 11.3.1 Any two things in the universe can be grouped together verbally.
(Example: you and your watch)
- 11.3.2 Anything in the universe can be placed in more than one category.
(Examples: music, musicians, movies)
- 11.3.3 Things are not the same simply because they carry the same label.
(Example: Leonard da Vinci, Picasso, Jackson Pollock and Andy Warhol may all be considered "artists.")
- 11.3.4 "Abraham Lincoln, Senator Joe McCarthy and Ronald Reagan were all Republicans." What might you presume about "Republicans" from this statement?
- 11.3.5 How we label or categorize a person will depend upon our purpose, our projections, and our evaluations; yet the person does not change just because we change the label or category.
- 11.3.6 Each classification tells us something about the way in which an object is considered (by someone) to be similar to certain other objects; each tells us something about the ways in which it is considered different from certain other objects.
- 11.3.7 We live in a world of ever-changing uniqueness that we map by using a language of static categories; therefore we have many opportunities for missed communication and misunderstanding.
- 11.4 " 'You'd be interested to know,' he (the psychiatrist) said, 'how many people come to me with troubles that are largely a matter of nomenclature. They suffer the tortures of the damned at the idea that a particular label may fit them or may not fit them. 'Am I a man? Am I a coward? Am I a failure? Am I an invert? Sometimes, simply, am I a lunatic?' If you could only get it through your head that it's you, only you, who's pinning the label on or taking it off, you'd have your problem half licked.' "
- Louis Auchincloss ^[14]
- 11.5 "A person's uniqueness is his most priceless possession. It gives him his reason to be."
- Earl C. Kelley ^[15]

11.6 A device called *indexing* can be used to remind us that no two things are identical:

child₁ is not child₂
cop₁ is not cop₂
patient₁ is not patient₂
Republican₁ is not Republican₂

The words *child*, *cop*, *patient*, and *Republican* emphasize perceived similarities; the index numbers point out uniqueness.

11.7 Failure to notice differences within a category leads to statements and attitudes such as:

I don't like Muslims.
Teachers are unfriendly.
You can't believe a thing you read in the newspapers.
I'll never trust another man.

11.8 "We discriminate against people to the degree we fail to distinguish between them."

– Irving J. Lee ^[1]

12.0 When we talk or write, we tend to act as if we know 'all' about a subject, as if we have said all about it.

12.1 Just as a map cannot say **all** about a territory, we cannot say or know **all** about anything.

12.1.1 Our sense organs abstract (select) from our environment.

12.1.2 We select what we pay attention to.

12.1.3 The words we select to describe an object or event tell about only **some** of the characteristics.

12.1.4 "All human knowledge is purchased at the price of ignoring something else."

– J. Robert Oppenheimer

12.1.5 "We see what we see because we miss all the finer details."

– Alfred Korzybski ^[4]

12.2 *Et cetera (Etc.)* can be used to remind us that more could be said.

12.3 If we think of the world known to scientists – of molecules, electrons, protons, neutrons, quarks, etc. – it becomes obvious that we cannot say or know **all**. We cannot say **all** about a single molecule. Yet we often label people or groups and **act as if** we have said **all** about them.

12.4 Many people are unhappy because they don't know all about this or that, and they wish they did. They tend to look for gurus, groups, movements, or political organizations that claim to have 'the' answer.

12.4.1 "The consuming hunger of the uncritical mind for what it imagines to be certainty or finality impels it to feast upon shadows."

– E. T. Bell

12.4.2 "Our censure should be reserved for those who would close all doors but one. The surest way to lose truth is to pretend that one already wholly possesses it. For narrow systems dogmatically held tend to trivialize the mentality of the investigator and of his students. Dogmatism makes for scientific anemia."

– Gordon W. Allport ^[16]

12.5 "One of the most tantalizing truths we know is that there is so much we may never know. . . . We simply cannot overtake the coy horizons of the sea of unawareness that surround our modest island of perception."

– Wendell Johnson ^[6]

13.0 Language tends to be static; the world, dynamic.

13.1 Much of our trouble in using words comes about because we forget that the world changes much faster than words do. We tend to use verbal maps that are out of date and that no longer adequately describe the territory.

13.2 "The same word stands for a person or thing or activity day after day, although the thing it stands for may change, grow, transform. We do not name the process, the originality, the development, the flux. We speak in static terms and learn to perceive and think that way."

– Laura Lee ^[17]

13.3 Our world has changed more in the past one hundred years than in all the time before. Yet we still talk as if these changes had not occurred – as if they are not continually occurring.

13.4 The survival of a civilization or an individual depends upon its ability to adapt to change.

13.5 "The only man who behaves sensibly is my tailor; he takes my measure anew each time he sees me, whilst all the rest go on with their old measurements and expect them to fit me."

– G. B. Shaw

13.6 "One cannot step in the same river twice."

– Heraclitus

- 13.7 “What we know of other people is only our memory of the moments during which we knew them. And they have changed since then. . . . At every meeting we are meeting a stranger.”

– T. S. Eliot ^[18]

- 13.8 “Facts change, but sufficient unto the day are the facts thereof. Indeed change itself would appear to be the most important fact of all. Facts as we see them are little more than quick glimpses of a ceaseless transformation – as if we viewed the separate frames of a moving picture without quite realizing that what we were viewing was, in fact, a moving picture.”

– Wendell Johnson ^[19]

- 13.9 Failure to recognize changes with time leads to attitudes such as:

If Joe said it, it’s a lie. He’s lied to me before.

You haven’t changed a bit.

Once a failure, always a failure.

- 13.10 “If I accept the other person as something fixed, already diagnosed and classified, already shaped by his past, then I am doing my part to confirm this limited hypothesis. If I accept him as a process of becoming, then I am doing what I can to confirm or make real his potentialities.”

– Carl Rogers ^[20]

- 13.11 *Dating* serves as a reminder that things are constantly changing.

Jason₂₀₀₄ is not the same as Jason₁₉₉₈.

Ms. Jenkins _{9:00PM} (after school) is not the same as Ms. Jenkins _{9:00AM} (during school).

14.0 The structure of our language leads us to confuse facts with inferences and assumptions.

- 14.1 “In English we have no grammatical constructions, verb tenses, or moods to distinguish what we have experienced from what we have assumed. It is easy to say and think we know when we are only guessing; the same words may describe or infer, depending on the context. We learn to perceive and think with this confusion.”

– Laura Lee ^[17]

- 14.2 Some confusion might be avoided if we reserve the word *fact* for statements of observation. Irving J. Lee made the following distinctions:

14.2.1 Statement of *fact*

- a. Made **after** observation or experience
- b. Is confined to what one observes or experiences
- c. Only a **limited number** can be made
- d. Represents a high degree of probability, is close to certainty
- e. We tend to get agreement when it is possible to make factual statements about an event or situation.

14.2.2 Statement of *inference*

- a. Made **anytime** – before, during or after observation
- b. Goes beyond what one observes or experiences
- c. Can make an **unlimited number** in any situation
- d. Represents some degree of probability
- e. We can expect disagreement if only inferential statements can be made regarding an event or situation.

14.3 We must make assumptions and inferences; we cannot possibly observe, check, and test everything. But it is important to our safety and sanity to recognize when we are in the realm of fact as opposed to inference or assumption.

14.4 We tend to have more confidence in our inferences when

- a. they are based on observations and
- b. they converge – that is, when several of our inferences point to the same conclusion.

14.4.1 Quantum mechanics, chaos theory, genetics, and other theories have developed from converging inferences of scientists representing various disciplines.

14.4.2 General semantics is built out of converging inferences from several fields of study.

15.0 The structure of our language pushes us toward ‘either-or’ evaluations.

15.1 Because our language is loaded with polarizing terms, such as *good-bad, old-young, strong-weak, big-little*, it is easy to talk about the extremes. It takes an active effort to talk in terms of *degrees*.

15.2 Most of the things we deal with are more accurately mapped by a statistical distribution than by *either-or* terms.

15.2.1 Are you *good* or *bad*? *Rich* or *poor*? *Old* or *young*? *Normal* or *abnormal*? *Successful* or *unsuccessful*? (Notice that your answers might depend upon your frame of reference.)

- 15.2.2 Scientists recognize degrees of difference and degrees of probability.
- 15.2.3 Beware of “hardening of the categories.”
- 15.3 *Either-or* evaluations occur frequently in the thinking of children, in political speeches, in arguments, etc.
- 15.3.1 Children will ask, “Was she a good witch or a bad witch?”
- 15.3.2 “You’re either with us or against us in the fight against terror.”
– President George W. Bush ^[39]
- 15.3.3 “A quarter century has been wasted with the squabbling over whether to make a child well adjusted or to teach him something.”
– *Life Magazine*, March 24, 1958
- 15.4 Wendell Johnson lists some of the ways that people create problems for themselves in his book, *People in Quandaries*:
- 15.4.1 They are striving for unobtainable or vaguely defined goals.
- a. They want to be healthy, wealthy, normal, good, popular, successful, loved, secure, etc. (Worthy goals, indeed – when they are meaningful.)
- b. They do not define their goals in specific terms, so they can never be sure if they have achieved them. For example, how do you know when you have achieved *success*? Is it something you will recognize or simply a verbal ghost?
- 15.4.2 They consider these goals in *either-or* terms. If they do not feel *successful*, they consider themselves *unsuccessful*; if not *popular*, *unpopular*; etc. They seem unaware of possibilities in between.
- 15.4.3 Because the alternative is so unacceptable, they feel they **must** achieve their goal. They become tense, unable to relax.
- 15.4.4 They are likely to be frustrated, because anything short of complete *success* (whatever that means) is considered *failure*; anything short of complete *goodness* is considered *bad*, etc.
- 15.4.5 Continued frustration is likely to lead to demoralization – a “what’s-the-use” attitude.
- 15.4.6 This sequence – Idealization, Frustration, then Demoralization – is called the **IFD** pattern of maladjustment.

16.0 With language we dissect the universe; we sometimes mistake our collection of parts for the whole.

16.1 Language permits us to 'split' with words what cannot be split in the world 'out there.' This is one form of what we call *elementalistic* language.

16.1.1 Einstein, recognizing the 'one-ness' of space and time, created the notion of *space-time*.

16.1.2 The verbal split between 'mind' and 'body' was partially healed by the term *psychosomatic*.

16.1.3 Korzybski coined the term *semantic reaction* (or *evaluational reaction*) to heal the artificial split between 'thoughts' and 'feelings'; *semantic reaction* refers to the total reaction of an organism-as-a-whole in its current environment.

16.2 From the Portuguese poet, Fernando Pessoa:

I saw that there is no Nature,
That Nature does not exist,
That there are mountains, valleys, plains,
That there are trees, flowers, grasses,
But there's not a whole to which this belongs,
That any real and true connection
Is a disease of our ideas
Nature is parts without a whole.
This perhaps is that mystery they speak of. ^[40]

16.3 Elementalism is also involved when we look for *the* cause of something, unconsciously assuming that there is just one cause.

16.3.1 *The* cause of juvenile delinquency; *the* cure for cancer; *the* way to bring up children.

16.3.2 Single-interest political action groups concentrate on one issue – 'the' issue, to them – at the expense of others. (Examples: abortion, gun control, tax cuts, balanced budget, welfare, union jobs, etc.)

16.4 Such words as *and*, *plus*, and *also* may be deceiving because they suggest simple addition.

16.4.1 Often the addition of one more element to a chemical reaction or one more person to a group will change the situation far more than the word *addition* suggests. The 'addition' of two pieces of uranium, for example, may set off an atomic chain reaction, as well as a chain reaction of social, political, and military activities.

16.4.2 *And* is used not only as a handy substitute for the arithmetic plus sign, but also in such phrases as “husband *and* wife.” Such a simple phrase belies the highly complicated relationships that may result.

17.0 Our language is not well suited to dealing with interactions.

17.1 The usual subject-predicate sentence structure suggests one-way and, generally, linear action.

17.1.1 The usual form is **actor–action–acted upon**. There is no suggestion in the language that something happens to the actor as a result of taking the action.

17.1.2 “We will defeat them” does not even hint that something may happen to **us** as a result of the victory. Similarly, “I hate him” does not suggest that I may be doing something to myself. “I will teach you” implies that I will perform the action to ‘teach’ and you will receive the action and be ‘taught.’

17.2 The term *feedback* applies when talking about interactions.

17.2.1 “Feedback is a method of controlling a system by re-inserting into it the results of its past performance.”

– Norbert Wiener ^[22]

17.2.2 *Negative* feedback tends to be corrective.

a. Thermostats and electro-mechanical governors control the performance of certain devices by means of negative feedback.

b. Feedback from an audience in the form of applause, yawns, frowns, or even silence enables actors and entertainers to modify their performances according to the audience response.

c. We make use of internal feedback when we evaluate our evaluations, think about how we think, doubt our doubts, question our questions, etc. An understanding of general semantics should increase this kind of feedback.

17.2.3 *Positive* feedback, instead of correcting and improving the performance of a system, tends to make it move further and further from its original position.

a. A ‘vicious spiral’ is an excellent example of positive feedback. Example: Bob smokes when he gets nervous, he worries about the effects of smoking on his wealth, which causes him to become more nervous and smoke more.

b. A positive type of feedback is also at work when we worry about worry, are afraid of being afraid, are ignorant of our ignorance, love love, etc.

17.3 When the result we predict becomes the cause or one of the causes of the result, we have what is called a *self-fulfilling prophecy*.

17.3.1 “If men define situations as real, they are real in their consequences.”
– W. I. Thomas and D. S. Thomas ^[23]

17.3.2 The results of public opinion polls may influence as well as reflect public opinion.

17.3.3 “I can’t dance” may be an accurate statement about Jason’s *current* abilities. But it may also be read as a prediction – a prediction that Jason can’t dance *now* and expects *never* to be able to dance. If he feels this prediction is ‘the truth,’ he will most likely fail whenever he tries to dance.

17.3.4 A category or label may become self-fulfilling. Consider such labels as:
I am not an *artist*.
I am *stubborn*.
Brandon is a *slow learner* (said in his presence).

17.4 Some conditions or diseases may be caused or exacerbated by being diagnosed.

17.4.1 Some people are crippled by being **told** they have a bad heart. They live and act as if they **had** such a condition and see in themselves many of the symptoms of the disease. (Read the description of **any** disease and see how many symptoms you can discover in yourself.)

17.4.2 There is considerable evidence that what we call stuttering is caused by over-anxious parents labeling normal non-fluency as *stuttering*. The child so labeled becomes self-conscious about his speech and, as a result, speaks even less fluently. The parents become more concerned, the child more self-conscious, and a vicious spiral goes into action.

17.4.3 Consider the possible effects on children of using labels such as *illegitimate, developmentally-challenged, gifted and talented*.

18.0 With words we describe, label, classify, evaluate, show relationships, etc.

18.1 When we use words, we abstract – that is, we select, we leave out things. We can talk about several levels of abstraction:

18.1.1 The *event* or *process* level: the territory as it is known to scientists consisting of molecules, particles, chemical reactions, energy, etc.; a restless universe of constant change.

18.1.2 The *object* level: the territory as it is known to our senses. We see only a

part of what we look at. We pay attention to only a part of what we see.

a. Happenings, activities, events take place at the event level. We detect them at the object level. These two levels are called the *silent levels* because they do not involve words.

b. "However theoretical systems may change and however empty of content their symbols and concepts may be, the essential and enduring facts of science and of life are the happenings, the activities, the events."

– Lincoln Barnett ^[2]

18.1.3 As we progress to the verbal levels, we might name or label the object, "Rex."

18.1.4 At the next verbal level we might describe the object in specific terms.

18.1.5 If we use the word *dog*, we have placed "Rex" in a class, but we have left out many details that make other dogs different from this one.

18.1.6 By noting similarities and differences between our *dog* and other animals, we may classify it as a *quadruped*.

18.1.7 This abstracting process (selecting, noting similarities and differences) can be carried on almost indefinitely – *mammal, animal, creature*, etc. As we continue this process of abstracting, we refer to less and less specific terms as *higher order abstractions*.

18.1.8 Evaluations, inferences, generalizations, statements about statements, etc., are all examples of higher order abstractions.

18.1.9 We tend to confuse different levels of abstraction because we use *to be* verbs that suggest "equal to" or "the same as."

a. *Is* used in this way is called the *is of identity*. Its use obscures the different levels of abstraction and the role of humans as classifiers.

b. Example: "Humans are animals." Are humans **the same** as animals? Or would it be more accurate to say they "are classified as animals?"

c. Example: "John is a liberal Democrat." Is *John* (a unique individual) the same as *liberal Democrat* (a name we apply to a group)?

d. The extent to which our language does our thinking for us is beautifully illustrated by this remark of an 'educated' man: "No matter what you call him, he's still a *liberal Democrat*." It would be more accurate to say: "No matter how you classify him, he is still a unique individual."

18.1.10 "Words are abstractions made of things; reports are abstractions made of

experience; inferences are abstractions made of descriptions. When people react to words as if they were things, to inferences as if they were descriptions, etc., they are confusing levels of abstraction.”

– Anatol Rapoport ^[5]

18.1.11 The abstracting process provides a form of feedback because our knowledge of the event level grows out of our higher order abstractions (similar to the “converging inferences” of scientific investigation). See 18.4

18.1.12 “Without abstraction, thought is impossible. We should spend all our lives collecting information if we tried to make a perfect picture of even a simple event.”

– W. W. Sawyer ^[24]

18.1.13 Knowing that we abstract, we become aware of our limitations. We ‘see’ in part; we ‘know’ in part. We become aware of the limitations of our language and our knowledge.

18.2 The natural order of learning or evaluating is: observation, investigation, or direct experience first, then words (descriptions, evaluations, inferences, generalizations, etc.).

18.2.1 Often we are confused by words because we have no direct (or even indirect) experience with the things for which they stand.

18.2.2 Many arguments and conflicts can be avoided by being aware that we abstract and that different people abstract in different ways.

18.3 “A preacher, professor, journalist, or politician whose high-level abstractions can systematically and surely be referred to lower level abstractions is not only talking, he is saying something.”

– S. I. Hayakawa ^[25]

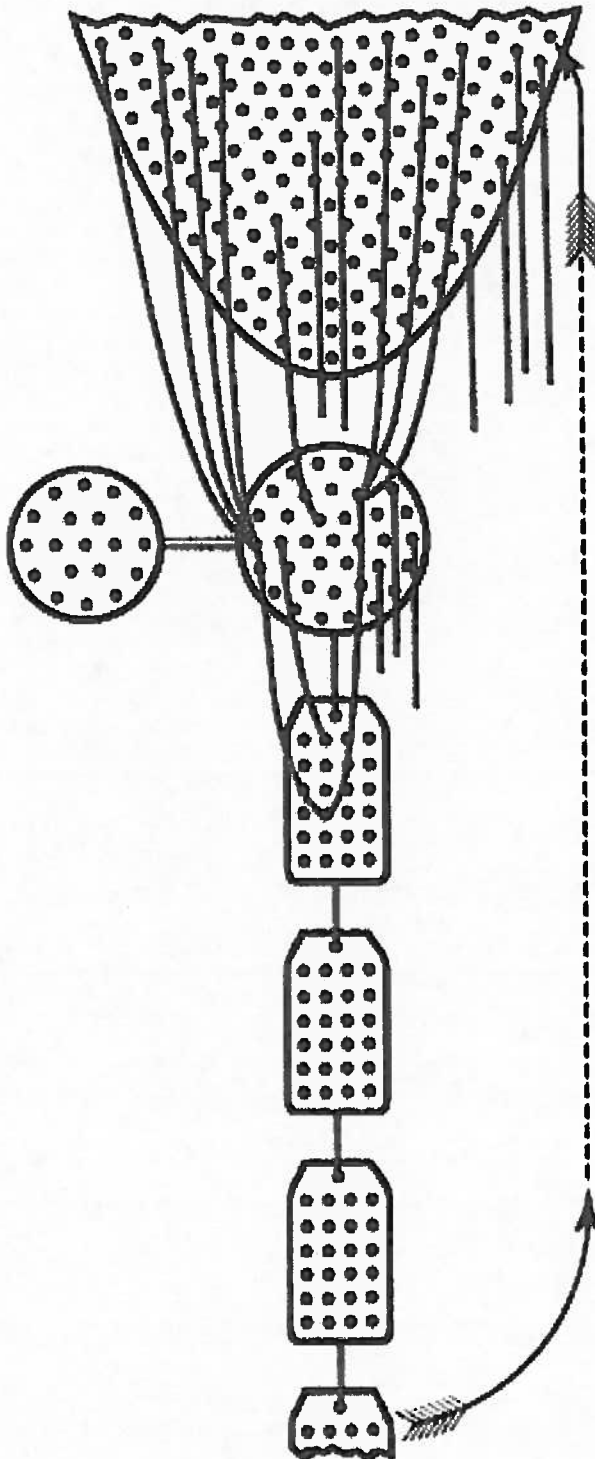
18.3.1 The “roller-coaster” technique for writing and speaking involves more-or-less systematic variations in the level of abstraction.

a. If you give your reader only specific information, he may ask you, “So what? What does it all add up to?” He is asking for your higher-level interpretations and generalizations.

b. If you give your reader only generalizations, she is likely to ask, “For example?” She wants to know how you arrive at your generalizations. She wants lower-level data, cases, examples, and descriptions.

18.3.2 When confusion arises in using high-level abstractions, ask for examples or descriptions. Consider the boy who *was a menace to society; a thief; a juvenile delinquent;* — or, a ten-year-old boy who took some tomatoes from a neighbor's garden without asking permission

18.4 The Structural Differential developed by Alfred Korzybski can be used to help us visualize the abstracting process and “circularity of knowledge,” or *feedback*.



The broken parabola – represents the complex submicroscopic, dynamic *process level*, inferred but not perceived, with an indefinite number of *characteristics*.

The circle below the parabola represents the object, person, situation, etc., that we perceive with our senses, abstracted from the process level. This is called the *object* or macroscopic level of ‘sense data,’ somewhat different for each person and from one time to another.

The third abstracting level is called the *label* or descriptive level, when we give a name or a description to what is perceived at the object level.

Then we can make statements that generalize or infer about the label or description, and continue these generalizations indefinitely.

The holes in the diagram represent characteristics. As we abstract, or select, from one level to the next we leave out some characteristics, designated by the hanging strings.

The connecting strings indicate the characteristics that are included in the subsequent level. As we generalize, we include fewer and fewer of the originally-perceived characteristics and introduce new characteristics by implication.

We can abstract on higher and higher orders, and we can make higher and higher order verbal generalizations as we move down the diagram and further from the immediate sense data. Completing this cycle of abstracting, we project onto the silent, dynamic levels our assumptions, inferences, theories and beliefs. This is shown on the diagram by the arrow that returns to the inferred process level, thus denoting our ‘circularity of knowledge.’ – Charlotte S. Read ^[21]

- 18.5 “We dip an intellectual net into fluid experience and mistake a catch of abstractions for quivering life.”
– Max C. Otto ^[26]

19.0 The degree to which communication occurs depends upon the degree to which the words of the speaker (writer) represent similar experiences to the listener (reader).

19.1 Strictly speaking, words don't ‘mean,’ people ‘mean.’

19.1.1 “Never ask ‘What does word X mean?’ but ask instead, ‘What do I mean when I say word X?’ or, ‘What do you mean when you say word X?’ ”
– P. W. Bridgman ^[27]

19.1.2 “Any communication is a problem of translation. Translation . . . involves in its broadest sense not so much finding words to match other words as finding experiences to match other experiences.”
– Anatol Rapoport ^[28]

19.1.3 “Reading is imagining, thinking, and feeling about ideas and thoughts made from past experience that are suggested by perception of printed words.”
– Edward Dolch ^[29]

19.2 Words do not have “one true meaning.”

19.2.1 For the 500 most used words in the English language, the *Oxford Dictionary* lists 14,070 meanings.

19.2.2 Words mean different things to different people.

19.2.3 Words mean different things at different times.

19.2.4 Words mean different things in different contexts.

She *beat* (hit) the drum with a stick.
He *beat* (defeated) Joe at chess.
This reporter has the mayor on his *beat* (area to cover).
Beats me (don't know), I ain't the regular crew chief.

19.2.5 A word may be used at different levels of abstraction, even within a single sentence. Words of this kind (and there are many of them) are called *multiordinal* terms.

I have a prejudice against prejudice.
I love love.
I have an idea of what your idea is.

- 19.2.6 Perhaps we should consider words as variables (like x in mathematics); their range of meanings is limited by the context in which they appear.
- 19.2.7 Many communication difficulties are caused by an uncritical assumption of mutual understanding.
- 19.2.8 “Words don’t *mean* ... only a person does. There is no meaning in a word. We sometimes refer to this as the ‘container myth.’ Now you can put something in a glass – water, dirt, sand, anything. A glass will hold something, and we can talk about this as a ‘container.’ A word, however, is not a container in the way a glass is. A container of *meaning* is a man, a woman. It’s you listening, it is I talking. It is I listening, it is you talking. A word doesn’t *mean*.”

– Irving J. Lee^[11]

- 19.3 Definitions tell you relationships between words. Descriptions tell you about relationships between words and things. Descriptions or examples are generally more useful in problem solving than definitions.
- 19.4 A dictionary should be considered a book of history, not of law.
- 19.5 Much misunderstanding is caused by ignoring contexts.

Sharon: “I hate police officers who abuse their powers.”

Sean: “Sharon said she hates police officers!”

20.0 Some words do not inform.

- 20.1 Some words are sounds that convey emotional feeling.

“Growl words” such as, “*Jones is a dirty, lousy S.O.B.*”

“Purr words:” such as, “*It’s a beautiful day!*”

- 20.1.1 Talk of this sort clearly involves projection. The speaker is projecting himself into the words. He is telling you he doesn’t like Jones. When he says, “It’s a beautiful day,” he may indicate that he doesn’t like rain, he had a good breakfast, his partner loves him, etc. He really hasn’t reported anything specific about Jones or today’s weather.

- 20.1.2 Ritual language – religious hymns, oaths, college cheers, etc. – are often uninformative but have emotional reasons for existing. They tend to form bonds of common reactions to verbal stimuli.

- 20.2 People often make noise simply to make noise.

- 20.2.1 “Speech is civilization itself. The word, even the most contradictory word, preserves contact – it is silence which isolates.”

– Thomas Mann^[30]

20.2.2 The lyrics of songs often do not make sense.

20.2.3 Expressions such as “How do you do?” and “How are you?” are usually not requests for information; they are simply the response society expects in certain situations. This type of language that contributes to a social mood more than as communication is referred to as *phatic* speech.

20.3 We are often satisfied with words that tell us nothing.

“What’s all this trouble about the budget?” Sean asked.
“Oh, it’s all just politics,” Sharon replied.
“That’s what I thought.”

Sean doesn’t know any more than he did before, but apparently he is satisfied.

20.4 Colorful words and catch phrases often influence us, yet they have little or no relationship to the territory.

Like no other
Can you hear me now?
No Child Left Behind
Good old days
Higher education

21.0 The way we use language both reflects and influences our psychological health.

21.1 “Words can arouse every emotion: awe, hate, terror, nostalgia, grief. . . . Words can demoralize a man into torpor, or they can spring him into delight; they can raise him to heights of spiritual and aesthetic experience. Words have frightening power.”

– Colin Cherry ^[7]

21.2 “The whole task of psychotherapy is the task of dealing with a failure in communication. The emotionally maladjusted person, the ‘neurotic,’ is in difficulty first because communication with himself has broken down, and second, because as a result of this, communication with others has been damaged.”

– Carl Rogers ^[31]

21.3 Maladjusted people frequently have semantic difficulties.

21.3.1 They tend to assume that everyone is having the same experience at the perceptual level as themselves – that there is only one ‘right’ way to look at or feel about anything.

21.3.2 They tend to assume that if they talk long enough, loud enough, ‘reasonably’ enough, they will be able to influence others to their way of thinking.

- 21.3.3 They tend to assume that the characteristic by which something is named, labeled, or judged is 'in' the object, that what they say about it is the 'right' characteristic, the 'real' name, the 'real' meaning.
- 21.3.4 They tend to make generalized conclusions from very few experiences in such a way that new experiences have to fit old conclusions or remain ignored.
- 21.3.5 They tend to shut out further consideration of a problem with, "That's all there is to it."
– William Pemberton (paragraphs 21.3.1-5) ^[32]
- 21.3.6 Although we sometimes talk as if sharp lines can be drawn between what we label as *adjusted* and the *maladjusted*, people are more complex than that. A person may be adjusted part of the time, maladjusted part of the time; adjusted in some areas, maladjusted in others; adjusted with respect to one group, maladjusted by the standards of another; etc.
- 21.3.7 Dr. Albert Ellis who pioneered Rational Emotive Behavior Therapy, advises clients to not *should on themselves*.
- 21.4 Questions that cannot be answered can upset us emotionally.
- 21.4.1 "In the whole history of human knowledge, there is scarcely any other notion more liberating, more conducive to clear headedness than the notion that some questions are unanswerable."
– Wendell Johnson ^[19]
- 21.4.2 "I suspect that a good deal of philosophy has had its origin in the endeavor to find verbally satisfactory answers to questions that sounded as though they ought to have answers."
– P. W. Bridgman ^[27]
- 21.4.3 Frequently questions cannot be answered because they contain high-level abstractions that cannot be reduced to lower level abstractions. If you cannot reduce them to lower level abstractions (preferably with examples or descriptions), for all practical purposes you do not know what you are talking about.
- 21.4.4 Unless the terms in these questions are defined in such a way that specific observations can be made or experiments performed, they are unanswerable, except in terms of opinion or belief.

Beautiful pictures, but are they art?
Am I **really** beautiful?
Why did this happen to me? Why was I even born?
Am I a failure?

21.4.5 “A part of the scientific method consists of fashioning questions that can be answered by means of observations that can be made.”
– Wendell Johnson ^[19]

21.5 The main tools of the clinical psychologist and psychiatrists are not machines, computers, or chemicals, but **words**.

21.5.1 “A man is never so serene as when he hears himself out, granting himself the quieting freedom to speak fully without fear of self-reproach.”
– Wendell Johnson ^[6]

21.5.2 Carl Rogers’ method of client-centered therapy has been described as “creative listening” – listening with a sincere effort to understand the client from the client’s point of view.

21.6 D. David Bourland, Jr., advocated the device known as *E-Prime* as a tool for avoiding the mis-evaluations resulting from the habitual use of the *is of identity* and *is of predication*. E-Prime promotes elimination of **all** forms of the verb *to be* such as *am, is, were, are, being, been*, etc.

21.7 Lexicographer Allen Walker Read advocated a linguistic revision he termed *EMA*, or *English Minus Absolutes*, as a means to more adaptive, less false-to-facts language. Except in very limited situations, he suggested avoiding terms that imply “allness” attitudes such as *all, every, none, nobody, absolutely, exact same, like no other, only*, etc.

22.0 The language of science emphasizes operational definitions, ‘objectivity,’ generalizations of high prediction value.

22.1 Modern scientific methods might be summarized (much too simply) as follows:

1. Ask questions in terms that suggest observations that can be made or experiments that can be performed; define your terms operationally;
2. Observe or experiment;
3. Describe the results in specific terms or record measurements;
4. Arrange, order, and classify the results;
5. Make tentative inferences, hypotheses, and generalizations;
6. Make predictions based on inferences, hypotheses, and generalizations;
7. Collect more data by further observation or experimentation in order to check predictions;
8. Revise inferences, hypotheses, generalizations in the light of new information;

9. Repeat the process again and again as necessary to get the desired precision, bearing in mind at each step your own role as observer, reporter, classifier, and generalizer. (The data do not “speak for themselves.”)

10. The goal of all this activity could be termed *effective simplicity*: to be able to predict a maximum number of events from a minimum number of postulates. The value of a theory lies in its prediction value. One aspect of predictability is to minimize shocks and surprises.

22.2 A scientific method is continuous; all of its conclusions are held subject to the further revision that new observations may require.

22.2.1 Dogma says: “This is so.”

22.2.2 Fiction says: “This isn’t so, but let’s pretend that it is.”

22.2.3 Hypotheses say: “Perhaps this is so; let’s see if it is.”

22.3 Probability is built into the very fabric of the scientific method. Generalizations are treated as tentative, provisional, and probable – rather than certain.

22.4 “What marks out science as a system of prediction and adaptation . . . is at bottom this, that it is a method that is shared by the whole society consciously and at one time. This at once implies that science must be communicable and systematic. Both the signals and the prediction must be of a kind that everyone can have in common.”

– Jacob Bronowski ^[13]

22.5 “The scientist, by the very nature of his commitment, creates more and more problems, never fewer. Indeed, the measure of our intellectual maturity, one philosopher suggests, is our capacity to feel less and less satisfied with our answers to better and better problems.”

– Gordon W. Allport ^[16]

22.6 “Experimental research is almost always a by-product of that curious mixture of doubt and certainty, of curiosity and faith, that separates the empiricist from the strictly rational pure theorist. A singular characteristic of scientific inquiry, then, is that it encourages doubt instead of suppressing it. From such faith in doubt, as it were, is generated the motivation for conducting a particular piece of research.”

– Percy H. Tannenbaum ^[33]

22.7 The methods of science can be used in many everyday problem-solving situations.

22.7.1 Note the order of the major steps: observe, describe, hypothesize, predict, observe, etc.

22.7.2 General semantics emphasizes a scientific approach or attitude as a preferred general orientation, or generalized way of solving problems. The methods of science have proven to be an effective means of time-binding.

23.0 The language of literature and poetry emphasizes expressions of feeling, subjective responses, uniqueness.

23.1 In many types of writing (fiction, myth, legend, poetry, etc.) we are not concerned with actual maps of real territories. When we say writing of this type is "true," we do not mean scientifically or historically true.

"What should be understood when people tell us that the plays of Shakespeare or the poems of Milton or Dante are 'eternally true' is that they produce in us attitudes toward our fellow men, an understanding of ourselves, or feelings of deep moral obligation that are valuable to humanity under any conceivable circumstances."

– S. I. Hayakawa ^[25]

23.2 Science enables us to cooperate; the arts establish a flow of sympathy and understanding so that we want to cooperate.

23.3 Actual experience comes to us in highly disorganized fashion. The novelist abstracts only the events relevant to his story and then organizes them into a meaningful sequence.

"Now here we see the beauty and the great value of the novel. Philosophy, religion, science, they are all of them busy nailing things down to get stable equilibrium. . . . But the novel, no. The novel is the highest example of subtle interrelatedness that man has discovered."

– D. H. Lawrence ^[34]

24.0 Our human abilities to create and communicate are intimately related.

24.1 "The most important thing about you is your self-image. Without a good one you cannot communicate well; you will be talking about your own misery. And the best way I know to create a good self-image is to create – to be a human being – a creator. There is not one person here who cannot be infinitely more creative if he will only open himself to experience."

– O. R. Bontrager ^[35]

24.2 "The creative person, instead of perceiving in predetermined categories ('trees are green,' 'college education is a good thing,' 'modern art is silly') is aware of this existential moment as it is, and therefore he is alive to many experiences that fall outside the usual categories ('in this light this tree is lavender,' 'this college education is damaging,' 'this modern sculpture has a powerful effect on me').

"The creative person is in this way open to his own experiences. It means a lack of rigidity and the permeability of boundaries in concepts, beliefs, perceptions and

hypotheses. It means a tolerance for ambiguity where ambiguity exists. It means the ability to receive much conflicting information without forcing closure upon the situation. It means what the general semanticist calls the 'extensional orientation.' "

– Carl Rogers ^[36]

24.3 Human survival depends upon creativity. We must develop new sources of power, new sources of food, new ways to combat disease, new ways to bring about understanding among human beings, etc.

24.4 In our educational system and in our homes, however, we seem to teach conformity – to think in terms of what other people do and what they will think. (Or what *we think* they will think.) Generally, we are taught *what* to think, not *how* to think.

"The virtue most request is conformity. Self-reliance is its aversion. It [conformity] loves not realities and creators, but names and customs."

– Ralph Waldo Emerson ^[38]

"Part of the problem is that we think very poorly. But how could it be otherwise when few of us have been given any instruction in that difficult task? Do schools teach us **how** to think? Very rarely. They teach us **what** to think. What we desperately need now – as individuals and as a society – is instruction in **how to think**."

– Steve Allen ^[41]

24.5 An educational system in which children are told they are not supposed to make mistakes is bound to inhibit creativity. Children will look for safety and ease and accepted solutions in order to not risk making mistakes.

24.6 "If you put a mouse into a maze and it gets it right the first time, it has not learned to run the maze. It does not learn until it makes some mistakes and learns to avoid them."

– Jacob Bronowski ^[13]

24.7 "Form the habit of reacting *yes* to a new idea. First, think of all the reasons it is good; there will be plenty of people around to tell you it won't work."

– Dr. Chauncey Guy Suits ^[37]

24.8 "Once we begin to look for differences instead of similarities, it is practically impossible . . . not to get new ideas. For the habit of asking 'How do these things differ?' or 'How might this be different?' is one of the basic techniques of originality or creativeness."

– Wendell Johnson ^[19]

25.0 It is useful to talk about several kinds of *knowledge*.

25.1 Knowledge₍₁₎: What you *know* (from experience).

25.1.1 Strictly speaking, all of this knowledge is out of date.

25.1.2 Much of it probably is still useful, but you cannot be certain of this. All of our knowledge has a probability attached to it.

25.1.3 Much of this first-hand knowledge is ignored as unimportant or dismissed as 'obvious.'

25.1.4 If you are certain, you don't need faith. But you cannot be certain; all you have is faith.

25.2 Knowledge₍₂₎: What you *know about* (from reading, listening, etc.).

25.2.1 Much of your knowledge is of this kind.

25.2.2 At best this kind of knowledge is your abstraction of someone else's abstraction of an event. Often many levels of abstraction are involved; reports of statements about generalizations from inferences about events, etc.

25.2.3 Strictly speaking, this knowledge is also out of date.

25.3 Knowledge₍₃₎: What you *know you don't know*.

25.3.1 You probably know you don't know how to explain how your cell phone works, how to read sanskrit, etc.

25.3.2 "To be conscious that you are ignorant is a great step toward knowledge."
– Disraeli.

25.4 Knowledge₍₄₎: What you *don't know you don't know*.

25.4.1 It is a serious thing to be ignorant of your ignorance. Before bacteria were discovered, people acted as if they 'knew' there were no bacteria.

25.4.2 Some areas of thought are closed to us because we do not know or have not invented words to represent them. For example, the invention of the *zero* spurred the development of mathematics.

What action might a native take on meeting a stranger if his language is limited to terms for *friend* and *enemy*?

25.5 Knowledge₍₅₎: What you *know* that is not so.

“The trouble with people is not so much with their ignorance as it is with their knowing so many things that are not so.”

– Psychiatrist William Alanson White ^[4]

25.6 Knowledge₍₆₎: What nobody *knows* now.

What new knowledge will come out of developing the next generation of post-Hubble telescopes, from nanotechnology research or stem cell research?

25.7 Knowledge₍₇₎: What you believe with such conviction that you feel you *know*.

25.7.1 “I know he would never harm another person.” “I know there is a God.”

25.7.2 ‘Knowing’ in this sense is personal, unique, not publicly demonstrable – therefore, not subject to scientific analysis.

“Every man, whether he is religiously inclined or not, has his own ultimate presuppositions. He finds he cannot live his life without them, and for him they are true. Such presuppositions – whether they be called ideologies, philosophies, notions, or merely hunches about life – exert creative pressure upon all conduct that is subsidiary to them (which is to say, upon nearly all of man’s conduct).”

– Gordon W. Allport ^[16]

25.7.3 It is important to be aware of the personal nature of this kind of ‘knowledge.’ We cannot ‘prove’ it in a scientific sense, nor can we insist that others believe as we believe.

25.7.4 Many arguments result because the word *know* has so many different meanings. Perhaps if we recognize that all evaluations, inferences, generalizations, etc., are, in a very real sense what we sometimes call *opinions* or *beliefs*, we would be more willing to qualify our statements with “I *think*” or “I *believe*” rather than “I *know*.”

25.8 “If we value the pursuit of knowledge, we must be free to follow wherever that search may lead us. The free mind is no barking dog to be tethered on a 10-foot chain.”

– Adlai Stevenson

25.9 “If the world has nearly destroyed itself, it is not from lack of knowledge in the sense that we lack the knowledge to cure cancer or release atomic energy, but is due to the fact that the mass of men [and women] have not applied to public policy knowledge which they already possess, which is indeed of almost universal possession, deducible from the facts of everyday life. If this is true - and it seems inescapable - then no education which consists mainly in the dissemination of ‘knowledge’ can save us. If men [and women] can disregard in their policies the

facts they already know, they can just as easily disregard new facts which they do not at present know. What is needed is the development in men [and women] of that particular type of skill which will enable them to make social use of knowledge already in their possession; enable them to apply simple, sometimes self-evident, truths to the guidance of their common life.”

– Sir Norman Angell ^[42]

26.0 The formulations of general semantics are intended to provide a mature, scientific, creative orientation.

- 26.1 **Time-binding:** The observable uniqueness of humans lies in our ability to create and to symbolize – to *time-bind*.
- 26.2 **Sensory awareness:** Knowledge begins with an awareness of the richness and variety of experience.
- 26.3 **Consciousness of abstracting:** Knowing that we abstract, we become aware of our limitations; we ‘see’ in part, we ‘know’ in part. We become aware of the limitations of our language and our knowledge.
- 26.4 **“To me” attitude:** There is considerable individual variation in the way we sense things, the way we react, and the way we symbolize.
- 26.5 **Delayed reaction:** A delay of even a fraction of a second permits the nervous system to consider alternatives. (Nerve impulses travel at a rate of about 220 feet per second.)
- 26.6 **Natural order of evaluation:** Observation, investigation, or direct experience first, then words (descriptions, inferences, etc.).
- 26.7 **Extensional devices:**
 - 26.7.1 **indexing** – a reminder that no two things are identical, that no word has exactly the same meaning twice
 - 26.7.2 **dating** – a reminder that no one thing is ever twice the same
 - 26.7.3 **quotes** – a reminder that a word is not being used in its usual sense; sometimes a kind of shorthand for ‘so-called’
 - 26.7.4 **hyphen** – a device sometimes used to unite elemental terms to produce non-elemental terms
 - 26.7.5 **etc.** – a reminder that you can’t say all (or know all) about anything

It can seem awkward and unnecessary to say or write out these devices except, at times, for emphasis. The place to apply them is ‘inside’ your thinking-evaluating system.

26.8 **The map-territory analogy:**

26.8.1 The verbal world may be thought of as a map of the extensional world.

26.8.2 A good map has a structure similar to the territory; it has prediction value.

26.8.3 Any attempt to map the complex, continuous, changing world of unique events with a simple, digital, static language of categories will necessarily involve distortion. An awareness of the limitations of language (reinforced by the extensional devices) provides a safeguard.

26.8.4 The accuracy of a map depends upon the accuracy of the measurements that have gone into its making.

26.8.5 The map is not the territory. Words are not the things they represent.

26.8.6 Even the best maps become obsolete sooner or later.

26.8.7 A map cannot tell all about the territory. Words cannot say all about anything.

26.8.8 The more territory a map covers, the less it can say about that territory. Details are lost as we generalize.

26.8.9 Different maps may show different features of the same territory.

26.8.10 Maps can be made of maps of maps, etc. Information about the territory cannot be increased in this way; it may be lost or distorted.

26.8.11 Check the map against the territory or against lower order abstractions whenever possible.

26.9 **Statistical thinking:**

26.9.1 Evaluations are more likely to be accurate if we recognize degrees of difference.

26.9.2 Degrees of probability are involved in all of our knowledge.

26.10 **Scientific method:** Science as a method is continuous; all of its conclusions are held subject to the further revisions that new observations may require.

26.11 **Creativity:** Human survival depends upon our creativity, on our ability to find new sources of food and power, new ways of inter-cultural cooperation, etc.

27.0 Making 'better' maps (maps more nearly similar in structure to the territory)

Some facts about the structure of the world as known to scientists	Structural dissimilarities in language	Corrective Actions
Process, change, dynamic structure	Static statements; 'final' formulations	Date your statements; expect change
Non-identity (no two things are identical)	Classification labels stressing similarities; <i>is of identity</i>	Indexing; individualization; look for differences; talk in terms of what a person or thing does , not what it <i>is</i>
Gradations; degrees of intensity, probability	<i>Either-or</i> structures; polar opposites	<i>To a degree; up to a point; somewhat; possibly; probably</i>
Fields of influence; inter-relationships	Statements in isolation; statements implying one-way relationship (e.g., actor-action-acted upon); <i>the cause; the reason</i>	Care in formulating; hyphens (<i>space-time, labor-management</i>); plurals (<i>causes, reasons</i>)
Non-symmetrical and non-additive relations	Simple symmetrical and additive formulations	Care in formulating; careful observations
Complex and organized in levels	Simple descriptions; elemental terms 'split' with words what cannot be split in the world 'out there'	Care in formulating; hyphens (<i>mind-body</i>); less elementalistic terms (<i>psychosomatic</i>)

Some facts about the human nervous system	Some results of ignoring these facts	Corrective Actions
Abstracts on several levels	Allness; dogmatism; seeking single causes and 'final' solutions	<i>Etc, and so on</i> ; consciousness of abstracting; plurals
Projects	Seeing our own evaluations as characteristic of 'the world'; prone to guess	<i>To me; I think; in my opinion; it seems to me; appears; etc.</i>
Reacts non-elementalistically (organism reacts as-a-whole-in-its-environments)	Dealing with 'thoughts', 'feelings' and 'tensions' <i>as if</i> they were unrelated	Hyphens (<i>thoughts-feelings</i>); less elementalistic terms (<i>semantic reactions</i>)
Creates symbols	Word magic; symbols confused with the things or relationships they are used to represent	Consciousness of abstracting and projecting; quotes
Reacts rapidly but not instantaneously	'Trigger' reactions	Delayed reactions

Some facts about language	Some results of ignoring these facts	Corrective Actions
The map <i>is not</i> the territory. The word <i>is not</i> the thing.	Primitivism; word magic; dogmatism; stereotypes	Consciousness of abstracting; indexing
The map is not <i>all</i> of the territory. You can't say <i>all</i> about anything.	Allness; dogmatism; 'final' answers	<i>Etc.</i> ; "not all" attitude
Multiordinal in structure. Map2 can be about map1. Words can be about words; statements about statements; etc.	Acting as if symbols have the same meaning in different contexts;	Consciousness of levels of abstracting; quotes; asking "What do you mean?"

General Semantics
(it's not what you think)

All our knowledge has its origins in our perceptions.
—Leonardo da Vinci

The worlds we manage to get inside our heads are mostly worlds of words.
—Wendell Johnson

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etc

ABSTRACTING

Conditionality

Inferences

Relationships

Visualized

Assumptions

Point of View

Similarities

Structure

Law

Perspective

Stereotypes

BIBLIOGRAPHY

* available from the Institute of General Semantics

Bachelard, Gaston. *The Philosophy of No: A Philosophy of the New Scientific Mind*. Translated from the French by G. C. Waterston. New York: Orion Press, 1968. Develops an epistemological profile of knowledge.

Barnett, Lincoln. *The Universe and Dr. Einstein*. New York: Harper, 1948. Penetrating popularization of some of Einstein's theories.

Bois, J. Samuel. *Explorations in Awareness*. New York: Harper, 1957. Suggestions on how to improve your skills in observing, thinking, communicating, written by an industrial psychologist and management consultant.

* Bois, J. Samuel. *The Art of Awareness*. Dubuque, Iowa: Wm. C. Brown, 1966. A general semantics text based on twenty years as teacher and consultant.

Bois, J. Samuel. *Breeds of Men*. New York: Harper and Row, 1970. Classifies human beings in terms of 'semantic breeds.'

Bronowski, Jacob. *The Common Sense of Science*. New York: Random House, 1951. Emphasizes that science is a human enterprise, both in its aims and techniques, and that it is closer to the world of arts and letters than most scientists or artists realize.

Chase, Stewart. *Power of Words*. Harcourt, Brace, 1953. Readable popularization of modern scientific, theoretical, and practical approaches to communication.

Cherry, Colin. *On Human Communication*. Cambridge, Mass.: Technology Press of Massachusetts Institute of Technology, 1957. A review, a survey, and a criticism. Includes material on information theory.

* Chisholm, Francis P. *Introductory Lectures in General Semantics*. 9th printing. Lakeville, CT: Institute of General Semantics, 1969. Transcribed from a course given in 1944.

Condon, John C., Jr. *Semantics and Communication*. New York: Macmillan, 1966. Introduction to semantics and general semantics.

* *ETC.: A Review of General Semantics*. This is the quarterly publication (since 1943) of the general semantics community, published by the Institute of General Semantics, PO Box 1565, Fort Worth, TX 76101. www.time-binding.org

* Fabun, Don. *Communication: The Transfer of Meaning*. Beverly Hills, Calif.: Glencoe Press, 1968. Colorfully illustrated, imaginative introduction to general semantics. Teacher's guide available separately.

* *General Semantics Bulletin*. This is a periodic publication of the Institute of General Semantics, PO Box 1565, Fort Worth, TX 76101. www.time-binding.org

Glorfeld, Louis E. *A Short Unit on General Semantics*. Beverly Hills, Calif.: Glencoe Press, 1969. Questions for discussion and writing assignments are included at the end of each chapter.

Gorman, Margaret. *General Semantics and Contemporary Thomism*. Lincoln: University of Nebraska Press, 1962. Critical analysis of general semantics. Includes a twenty-page bibliography.

Haney, William V. *Communication Patterns and Incidents*. Homewood, Ill.: Richard D. Irwin, 1960. Filled with examples and incidents; focuses on what it is that happens inside a communicator before and as he communicates.

Haney, William V. *Communication and Organizational Behavior*. Homewood, Ill.: Richard D. Irwin, 1967. Revision of *Communication: Patterns and Incidents*. Especially for business and industry.

Hayakawa, S. I. *Symbols, Status and Personality*. New York: Harcourt, Brace and World, 1963. The influence of symbols and self and others.

* Hayakawa, S. I. and Hayakawa, Alan R. *Language in Thought and Action*. 5th ed. New York: Harcourt Harvest, 1990. A popular presentation, used as a text in high school and college courses.

Johnson, Alexander Bruan. *A Treatise On Language* (1836). Edited by David Rynin. Berkeley and Los Angeles: University of California Press, 1959. Written in 1836, this book anticipates many of the discoveries and theories of modern semantics.

Johnson, Kenneth G., ed. *Research Designs in General Semantics*. New York: Gordon and Breach Science Publishers, 1972. Papers presented at a conference on research designs.

* Johnson, Kenneth G., John Senatore, Mark Liebig, and Gene Minor. *Nothing Never Happens*. Beverly Hills, Calif.: Glencoe Press, 1973. Exercises and activities to trigger group discussion, plus related readings on general semantics, interpersonal relations, etc. Teacher's edition provides additional materials. Available on CD-ROM.

* Johnson, Wendell. *People in Quandaries: The Semantics of Personal Adjustment*. New York: Harper & Row, Eighth Printing, 2002, published by the International Society for General Semantics. About the problems we have in trying to live with ourselves and with each other. Emphasizes those aspects of scientific method that are useful in daily living.

Johnson, Wendell. *Your Most Enchanted Listener*. New York: Harper, 1956. The fateful process of Mr. A. talking to Mr. B., particularly when Mr. A. and Mr. B. are one and the same person – as, of course, they are, whoever else they may be.

Kelley, Earl C. *Education for What Is Real*. New York: Harper, 1947. How to see what stares you in the face.

Keyes, Kenneth. *How to Develop Your Thinking Ability*. New York: McGraw-Hill, 1950. A simplified presentation of general semantics.

* Korzybski, Alfred. *Manhood of Humanity*. 2d ed. Lakeville, Conn.: International Non-Aristotelian Library Publishing Co., 1950. Korzybski's first work, originally published in 1921. In it he develops his theory of time-binding, which became the foundation for general semantics. Distributed by the Institute of General Semantics, Fort Worth, Texas.

* Korzybski, Alfred. *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics*. 5th ed. Englewood, New Jersey: International Non-Aristotelian Library Publishing Co., 1994. The first edition of this original formulation of general semantics appeared in 1933. Distributed by the Institute of General Semantics, Fort Worth, Texas.

* Korzybski, Alfred. *General Semantics Seminar, 1937*. Third Edition edited by Homer J. Moore. Institute of General Semantics. Transcribed from notes of lectures given at Olivet College.

* Lee, Irving J. *Language Habits in Human Affairs*. New York: Harper, 1941. A fine introduction to general semantics.

Lee, Irving J. *How to Talk with People*. New York: Harper, 1952. Report of Communication problems observed in two hundred meetings of corporation boards and committees.

Lee, Irving J. and Laura L. Lee. *Handling Barriers in Communication*. New York: Harper, 1957. Lecture-discussions and conferees handbook employing the case-study method. Reprinted by the International Society for General Semantics, San Francisco. 1968.

Lee, Irving J. *The Language of Wisdom and Folly*. 2d ed. San Francisco: International Society for General Semantics, 1967. Readings from a wide variety of authors on basic semantic issues.

Lee, Irving J., ed. *Customs and Crises in Communication*. New York: Harper, 1954. Cases for the study of some barriers and breakdowns.

Magee, John. *The General Semantics of Wall Street*. Springfield, Mass.: John Magee, 1958. Although Mr. Magee's 'laboratory' is the market, his particular interest is in the problem that each of us face today – of re-educating ourselves to the end of becoming more adequate in adapting to and coping with a changed and changing world.

Maslow, Abraham. *Toward a Psychology of Being*. 2d ed. New York: Van Nostrand Reinhold, 1968. Essential to understanding Maslow's notion of self-actualization.

Maslow, Abraham. *Motivation and Personality*. 2d ed. New York: Harper and Row, 1970. A general theory of motivation based on holistic and dynamic principles.

Minteer, Catherine. *Words and What They Do to You*. Lakeville, Conn.: Institute of General Semantics, 1965. Lesson plans for junior and senior high school.

Minteer, Catherine. *Understanding in a World of Words*. San Francisco: International Society for General Semantics, 1970. Junior high school textbook, with exercises and tests.

Morain, Mary S., ed. *Teaching General Semantics*. San Francisco: International Society for General Semantics, 1969. A collection of lesson plans for college and adult classes.

Murray, Elwood, Gerald M. Phillips, and J. David Truby, with exercises by Alton Barbour. *Speech: Science-Art*. Indianapolis: Bobbs-Merrill, 1969. An approach to speech that emphasizes general semantics. Suggestions for discussion at the end of each chapter.

Postman, Neil, Charles Weingartner, and Terrence P. Moran. *Language in America*. New York: Western Publishing Co., 1969. A report on our deteriorating semantic environment.

Rapoport, Anatol. *Science and the Goals of Man*. New York: Harper, 1950. Scientific method, according to Rapoport, implies a system of ethics.

Rapoport, Anatol. *Operational Philosophy*. New York: Harper (Science Editions), 1953. How we know what we know, approached operationally.

Rogers, Carl. *Client-Centered Therapy*. Boston: Houghton Mifflin, 1951. The goal of psychotherapy, Rogers says, is to improve communication within and between the people.

Ruesch, J., and Gregory Bateson. *Communication: The Social Matrix of Society*. New York: W. W. Norton, 1951. A psychiatrist and an anthropologist produced this study in human maladjustment and its relief.

Satir, Virginia. *Conjoint Family Therapy*. Palo Alto, Calif.: Science and Behavior Books, 1967. See especially chapters 8 and 9 on communication theory.

Sawyer, W. W. *Mathematician's Delight*. New York: Penguin Books, 1946. Readable introduction to the language of mathematics.

Sondel, Bess. *The Humanity of Words*. Cleveland, Ohio: The World Publishing Co., 1958. Analyzes and evaluates the three major sources of semantic theory – Ogden and Richards, Korzybski, and Charles Morris.

Thayer, Lee, ed. *Communication: Perspectives from General Semantics*. New York: Spartan Books, 1970. Based on a conference exploring the theme 'A Search for Relevance.'

* Weinberg, Harry L. *Levels of Knowing and Existence*. New York: Harper, 1959. Stresses the role of general semantics in unifying knowledge acquired in a variety of fields.

Weiss, Thomas M., and Kenneth H. Hoover. *Scientific Foundations of Education*. 2d ed. Dubuque, Iowa: Wm. C. Brown, 1964. An approach to education that emphasizes general semantics.

Whorf, Benjamin Lee. *Language, Thought and Reality*. Edited by John B. Carroll. New York: John Wiley and the Technology Press of Massachusetts Institute of Technology, 1956. Posthumously published, this book contains almost all of Whorf's writings on the hypothesis that the structure of language influences our thought processes and our perception of the world about us.

Williams, Roger J. *You Are Extraordinary*. New York: Random House, 1967. Explores uniqueness and its profound implications.

Expanded Bibliography (2004)

Allen, Steve. *Dumbth: The Lost Art of Thinking with 101 Ways to Reason Better and Improve Your Mind*. Amherst, New York: Prometheus Books, 1998. "The ultimate 'how to' book." Includes a chapter recommending general semantics.

* Bourland, D. David, Jr. and Johnston, Paul Dennithorne, eds. *To Be or Not: An E-Prime Anthology*. International Society for General Semantics, 1991. First collection of papers and articles that debate the proposal to eliminate all forms of *to be* from language use.

* Bourland, D. David, Jr. and Johnston, Paul Dennithorne, eds. *E-Prime III! A Third Anthology*. International Society for General Semantics, 1997. Third in the series of papers, articles, debates and analyses concerning E-Prime.

* Caro, Isabel and Read, Charlotte, eds. *General Semantics in Psychotherapy*, Institute of General Semantics, 2002. Selected writings on methods aiding therapy with Foreword by Albert Ellis.

Csikszentmihalyi, Mihaly. *Flow: The Psychology of Optimal Experience*. New York: Harper Collins Publishers, 1990. The author's notion of "flow" correlates nicely with the general semantics formulations of an extensional orientation and non-verbal awareness.

Ellis, Dr. Albert, *A New Guide to Rational Living*. Hollywood, California: Wilshire, 1975. Ellis explains why he used E-Prime to revise his book and how it contributes to the book's overarching message.

* Johnson, Kenneth G., ed., *Thinking Creatively* with Foreword by Steve Allen. Institute of General Semantics, 1992. Collection of articles selected primarily from the 1988 International Conference on General Semantics at Yale University.

* Johnston, Paul Dennithorne; Bourland, D. David, Jr.; and Klein, Jeremy; eds. *More E-Prime: To Be or Not II* with Foreword by Albert Ellis. International Society for General Semantics, 1994. Second of three anthologies devoted to debating the merits of E-Prime.

* Kendig, M., ed. *Alfred Korzybski: Collected Writings 1920-1950*. Institute of General Semantics, 1990. Complete published writings of Korzybski, other than *Science and Sanity* and *Manhood of Humanity*.

* Kodish, Bruce I. and Susan P. *Drive Yourself Sane*, Revised Second Edition with Foreword by Albert Ellis. Pasadena, California: Extensional Publishing, 2001. From the Foreword: "Applies Korzybski's brilliant general semantics philosophy to its readers' everyday lives and show them how to live more sanely."

Langer, Ellen J. *Mindfulness*. Reading, Massachusetts: Perseus Books, 1989. Her formulation of "mindfulness" closely parallels a general semantics orientation.

* Levinson, Martin H. *The Drug Problem: A New View Using the General Semantics Approach*. Westport, Connecticut: Praeger Publishers, 2002. Comprehensive work that demonstrates how general semantics can be applied to a critical social issue.

* MacNeal, Edward. *Mathsemantics: Making Numbers Talk Sense*. New York: Penguin Books, 1994. "An interesting and helpful discussion of the common sense surrounding the fine art of calculating and estimating."

Postman, Neil. *Conscientious Objections*. New York: Vintage Books, 1992. See chapter titled, "Alfred Korzybski."

Postman, Neil. *The End of Education: Redefining the Value of School*. New York: Vintage Books, 1996. See chapter "The Word Weavers/The World Makers" that addresses the importance of general semantics.

* Pula, Robert P. *A General Semantics Glossary: Pula's Guide for the Perplexed*. International Society for General Semantics, 2000. An indispensable resource for students of general semantics.

* Sawin, Gregory, ed. *Thinking and Living Skills: General Semantics and Critical Thinking with Introduction by Alvin Toffler*. International Society for General Semantics, 1995. Excellent anthology of articles that cover a broad range of topics related to general semantics.

Wilson, Robert Anton. *Quantum Psychology: How Brain Software Programs You & Your World*. Tempe, Arizona: New Falcon Publications, 1990. Collection of essays including a chapter that advocates E-Prime.

Quotation Attributions

1. Lee, I., "On Language and General Semantics," *General Semantics Bulletin*, No. 22-23 (1958)
2. Barnett, *The Universe and Dr. Einstein*
3. Johnson, W., "General Semantics and the Science Teacher," *American Journal of Physics* 15 (March-April 1947), pp. 154-156
4. Korzybski, *Science and Sanity*
5. Rapoport, *Science and the Goals of Man*
6. Johnson, W., *Your Most Enchanted Listener*
7. Cherry, *On Human Communication*
8. Kelley, *Education for What is Real*
9. Bois, *Explorations in Awareness*
10. Whorf, "Language, Mind and Reality" *ETC: A Review of General Semantics*, Vol 9 No. 3 (Spring 1952)
11. Lee, *Talking Sense*, 1952 Television Series "Of Men and Ideas"
12. Korzybski, "What I Believe" *Manhood of Humanity*
13. Bronowski, *The Common Sense of Science*
14. Auchincloss, *Venus in Sparta*

15. Kelley, "The Significance of Being Unique" *ETC: A Review of General Semantics*, Vol 14 No. 3 (Spring 1957)
16. Allport, *Becoming*
17. Lee, L., "Two Kinds of Disturbed Communication" *General Semantics Bulletin*, Nos. 22-23 (1958)
18. Eliot, *The Cocktail Party*
19. Johnson, W., *People in Quandaries*
20. Rogers, "The Characteristics of a Helping Relationship" *Personnel and Guidance Journal* (September 1958)
21. Read, handout from the Institute of General Semantics
22. Wiener, *The Human Use of Human Beings*
23. Thomas and Thomas, *The Child in America*
24. Sawyer, *Mathematician's Delight*
25. Hayakawa, *Language in Thought and Action*
26. Otto, *The Human Enterprise*
27. Bridgman, *The Way Things Are*
28. Rapoport, "Saying What You Mean," *ETC: A Review of General Semantics*, Vol 13 No. 4 (Summer 1956)
29. Dolch, *Psychology and Teaching of Reading*
30. Mann, *The Magic Mountain*
31. Rogers, "Communication: Its Blocking and Its Facilitation" *Northwestern University Information* 20, No. 25 (1952)
32. Pemberton, "A Semantic Approach to Counseling" *ETC: A Review of General Semantics*, Vol 13 No. 2 (Winter 1955-56)
33. Tannenbaum, *Introduction to Mass Communication Research*, edited by Nafziger and White
34. Lawrence, "Morality and the Novel" *Phoenix*
35. Bontrager, in a lecture at the 1957 seminar-workshop, Institute of General Semantics
36. Rogers, "Toward a Theory of Creativity" *ETC: A Review of General Semantics*, Vol 11 No. 4 (Summer (1954)
37. Suits, *Applied Imagination*
38. Emerson, "Self-Reliance" (essay)
39. Bush, November 6, 2001, as reported on the CNN website (www.cnn.com)
40. Quoted by George Doris in "Korzybski and General Semantics," *General Semantics Bulletin* No. 50, 1983
41. Allen, Foreword to *Thinking Creatively*, edited by Kenneth G. Johnson, 1991
42. Lee, *Language Habits in Human Affairs*, 1941
43. Peirce, as quoted by Sanford I. Berman in *Words, Meanings and People*, 1982

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