

GENERAL SEMANTICS :
WHENCE 1920 . . . WHERE 1973 . . . WHITHER ?

22nd ANNUAL
KORZYBSKI MEMORIAL MEETING

Sponsored by the
Institute of General Semantics
and
Alfred Korzybski Foundation

Saturday 27 October 1973
10:00 to 4:30

At COLUMBIA UNIVERSITY
The School of Law
435 West 116th Street at Amsterdam Avenue
New York City

THE PROGRAM

Moderator of the Meeting: Merritt A. Williamson

10 - 12 Opening Remarks by M. Kendig and Charlotte S. Read

Elton S. Carter: Developing An Educational-Heuristic Orientation
in the Evolution of 'General Semantics'

Comments by Robert P. Pula

J. Samuel Bois: Korzybski Memorial 1973

Comments by Rachael Lauer

- LUNCHEON -

Butler Hall Penthouse Restaurant

2 - 4:30 Walter Probert: Exploring the Dynamics of Verbal Communication,
from Viewpoints of Korzybski, Wittgenstein,
Austin and McLuhan

Comments by Allen Walker Read

COLLOQUIUM: Discussion by the panel speakers and members
of the audience

THE PANELISTS

J. SAMUEL BOIS - ELTON S. CARTER - WALTER PROBERT

J. SAMUEL BOIS (Ph.D. McGill), an octogenarian psychologist with a long and successful career in his profession in Canada and the U.S.A., 'discovered' general semantics in 1939. In his own words, 'it helped him understand his past and present: Why he had left the priesthood as a profession, why he could not accept most of what was being taught and practiced as psychology, why there is such a turmoil in people's minds and hearts today, why so many institutions are cracking all over.' He lectured at Korzybski's seminars in 1947, '48 and '49, was principal lecturer at the seminar-workshop in 1950, and conducted advanced seminars at the Institute in the early fifties. His articles have appeared in the *General Semantics Bulletin* and *ETC.*, and he has been a trustee of the Institute and on the Board of the International Society for General Semantics.

After retirement from management consulting work in 1956, he helped establish Viewpoints Institute in Los Angeles, where he still teaches. For the past twelve years he has given courses at the University of California Extension, and is still an instructor to graduate students at the School of Public Administration, University of Southern California.

Epistemics: The Science-Art of Innovating (1973) is his fifth book in a series that describes his itinerary from Aristotelian-Thomistic orientation, through standard scientific episteme, on to his actual self-questioning and self-renewing semantic stance. The earlier books are: *Explorations in Awareness* (1957), *The Art of Awareness* (1966, 2nd ed. 1973), *Communication as Creative Experience* (1968), *Breeds of Men* (1970).

ELTON S. CARTER (Ph.D. Northwestern) is Dean for Graduate Studies, University of Nebraska at Omaha, where he has been for six years. Besides his administrative work there, he teaches an undergraduate-graduate course in general semantics during the Spring term. His own undergraduate studies at the University of Maine focused on speech and psychology. He was introduced to general semantics while working as Graduate Assistant to Dr. Irving J. Lee at Northwestern. There he wrote his dissertation on 'Doctrines of Cassius J. Keyser in Relation to Argumentation and Discussion Theories,' an important contribution to an understanding of Korzybski's early work. During this time he also taught argumentation at John Marshall Law School, Chicago.

Since his first seminar-workshop at the Institute of General Semantics in 1949, and Dr. Bois' advanced seminar in 1953, Dr. Carter has led a seminar at the Institute in 1955 on *Science and Sanity*, taught general semantics for ten years at Pennsylvania State University in an introductory course and a graduate seminar on research, and conducted an Institute seminar in New York. He was also associated in various capacities with a research and development company, HRB-Singer, where he worked on design of data processing and analysis for intelligence systems, etc.

He has written many articles for the *General Semantics Bulletin*, especially concerned with relationships between Korzybski and Keyser, and with the heuristic approach to pedagogy and problem-solving.

WALTER PROBERT (J.D. University of Oregon, 1951; J.S.D. Yale, 1957) has been Professor of Law at the University of Florida, Gainesville, since 1959, with interim visits at Northwestern University, University of Denver, University of Texas, and University of Washington. Previously he was a professor at the Case Western Reserve University Law School. He had a research grant to Oxford in 1968 for, as he wrote, 'the specific purpose of getting contact with what is left of "the language philosophers," to get it orally rather than just in writing... the different media of interchange do make a difference.'

While at Yale he discovered Korzybski and wrote his doctoral thesis on 'Law and General Semantics,' so far as we know the first in this field. He participated in general semantics seminar-workshops 1958-60. He has published various articles in professional journals involving general semantics considerations, and in the *General Semantics Bulletin* and *ETC.* His essay on general semantics was reprinted in *Landmarks of the Law*. Dr. Probert's book, entitled *Law, Language and Communication*, six years in preparation, was published in November, 1972 (Charles C. Thomas). In it he experiments with novel techniques of analysis and demonstration.

This year Dr. Probert is in Washington on special assignment as Director, Law and Social Science Program, National Science Foundation.



Photographs by
STEFAN CONGRAT-BUTLAR
New York

with the exception of the
photograph of Robert Pula

Photographs, Left to right -

Top: The audience at Columbia University, 27 October 1973; Elton Carter and Walter Probert; J. Samuel Bois

Middle: Rachel Lauer; Dr. Joseph Meiers during discussion; Merritt Williamson, Chairman
It was Dr. Meiers who first suggested the Alfred Korzybski Memorial Lecture series.

Bottom: M. Kendig making a comment; Charlotte Read; Allen Walker Read; Robert Pula playing the piano at a seminar

OPENING REMARKS - 1973

M. KENDIG: I won't use the microphone because I have a terrific voice. Anybody who can't hear me? Probably some of you know me. My name is M. Kendig. [Applause] I'm almost the oldest living person in general semantics. I think Sam Bois has two months on me, but that's about all. [Laughter]

This is what you might call the Annual Meeting of the people who contribute to the support of the Institute and are called 'members'. I report that I am the Interim Director for now. I resigned in 1964 as Director, and then became Consulting Director - whatever that means. I was going to bring out the book of Korzybski's collected writings, which I find that people need to know about. I used to complain because people didn't read Science and Sanity, and now I complain that they stick just to Science and Sanity and think the man didn't write anything afterwards. Because he did change -- we won't say his mind -- but he certainly changed a great deal in the many years from '33 until '50 when he died.

I'm very much to blame that people don't read these papers that somehow don't contradict, but are quite an extension of many of the things that you would find in a book called Science and Sanity. Sometimes when I talk with groups they say, 'well, who is this man Korzybski?' And yet they're people -- some of them at least are -- who are teaching what they call 'general semantics'. I think they just should know the name.

At the end of '71 I decided to volunteer to again be Director of the Institute, but I call myself 'Interim Director'; 'interim' is something different from 'acting' or 'pro tem'. I looked it up in the dictionary, and it's between two periods, a time between two periods. I believe we're in a time when we must think in terms of two periods. There was a time when you couldn't study general semantics and non-aristotelian systems except at the Institute. Now you can go to many colleges in the country and get a course called 'general semantics'. I don't know what you get in it, but you get a course. So there's a great deal of activity. We have all these horrors in the seventies, and yet there is another thing that's happening: I feel that there's a great change in the semantic climate, that people are saying, 'We really must rethink things. We must change our attitudes.' How to do it -- that's a different matter.

Our whole job is very simple and yet, our methodology for changing our premises and our attitudes is extremely difficult. We're in a period of change, an interim bridging from one period to another. So in a way I'm the bridge - the Interim Director. We are focussing now on the Alfred Korzybski centennial, which will be in '79. I dreamed up this idea of having a panel this year - something different - and I hope it will work out. We invited some wonderful people and it's all up to them now. I'm going to introduce them first, though.

Elton Carter has been at the University of Nebraska at Omaha for six years, where he is Dean for Graduate Studies. He was introduced to general semantics by Irving Lee. I associate him with Penn State University, where he taught courses in general semantics for many years.

Next to him is really the 'baby' of the panel, Walter Probert. He didn't 'discover' (to use Sam Bois' term) general semantics till 1957, I think, when he got his doctorate at Yale in the science of jurisprudence. He wrote his doctoral dissertation on law and general semantics, so far as I know the first such thesis.

Next to him is a new person to most of you -- Merritt Williamson. He is a Distinguished Professor of Engineering Management at Vanderbilt University in Nashville at the Engineering Management Center there. He's been in both education and all sorts of big business. He's not a new recruit. He's been very interested in Korzybski's work for many years, but I don't think you've heard about him so much. He's going to be the moderator.

Then next to him is our dear friend Sam Bois. I think everybody here knows Sam. He 'discovered' general semantics about 1939 and has been very active ever since. Don't be asleep, darling . . . I'm introducing you . . .

SAM BOIS: That's right . . . I'm getting old . . . I'm older than you, do you know that? [Laughter]

Then there's my good friend and colleague, practically since the beginning of the Institute, Charlotte Read. She made all the arrangements for this meeting, and she does a lot of other things besides, for the Institute, for Korzybski's work . . .

And now it's all up to them. So goodbye.

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MERRITT WILLIAMSON: Thank you very much for those opening remarks. I was indeed honored when I received a phone call from M. Kendig asking me if I would be moderator for this meeting. This is my first general semantics meeting. Although I am teaching a course at Vanderbilt in the Graduate School of Management, it is called 'communication' but is taught from a general semantics point of view. This may be one of those courses that was referred to. [Laughter] I hope not!

I suppose that my selection as moderator makes a certain amount of sense. I'm a very moderate person. Also, I suppose that it's appropriate in quite another sense too. I'm a complete unknown in G. S. circles and therefore, that should minimize the risk of my monopolizing the podium and thus infringing on the time of our panelists from whom you can learn a great deal more than you can from me.

On the other hand, it's always risky to invite a college professor to preside, since so many college professors are preset to fifty minutes when they get up and get hold of the podium. [Laughter] However, you may have no fear; I'm too eager to listen to our speakers and to see what knowledgeable general semanticists do when they're in action, and hopefully to see them perform under fire during this period scheduled as a colloquium.

Now we have decided how we're going to operate this morning, and I would like to give you a few of our ground rules. As moderator I come equipped with Life Savers, a watch, and a jack-knife that I can rap on the table to get attention if this is necessary. I'm also larger than any of the panelists, so if there's any trouble I'm not afraid.

Each speaker will speak for about twenty-five or thirty minutes, and then they will be followed by a discussant, who will probably take from ten to fifteen minutes. I will call time on these people: I will yank their coattails or rap on the table, or in some way distract them to give them about a five minute warning. Then any questions that you have we will answer this afternoon. So it's agreed with the speakers that I'm going to be quite ruthless as far as their time is concerned, and we'd like to keep the schedule going. That is about all that I have to say, and I will turn the meeting over first to Charlotte Read.

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CHARLOTTE READ: I wanted to say a few things about our being here at Columbia University today to begin this series of panel meetings. One of the main reasons is because of Korzybski's close association with Professor Cassius Keyser, who was the Adrain Professor of Mathematics here at Columbia when Korzybski wrote his book Manhood of Humanity. Late in 1919 or early 1920, when Korzybski came to see Keyser and showed him his rough manuscript Keyser immediately felt it to be very important. He postponed writing his own book, Mathematical Philosophy, and devoted much time to helping Korzybski with his.

He helped him to write in English (he began to learn English only when he came to this country and Canada during the First World War). And Keyser suggested books for him to read which would be important for his work, and so on. He was a guide and mentor for Korzybski and they maintained a close and warm friendship for years. We're very pleased and honored that Mrs. Keyser is at our meeting here today.

There's a very interesting correspondence between the two men and it is located in the university library here in a special collection. In fact, Korzybski's correspondence from about 1920 to after writing Science and Sanity up until 1938 is in the special collection here. I find this correspondence extremely fascinating because we have letters with the leading scientists and scholars of the day -- it's a kind of intellectual history of the 1920's and '30's. There are letters to and from Percy Bridgman, Eric Temple Bell, Arthur Bentley, and so on. They give an almost day by day account of his thinking, his feelings, as he worked out his theory. Science and Sanity was published in October 1933, which makes it just forty years ago.

Since those days of the 1920's and early '30's very much has happened. There have been new breakthroughs, new directions, and we're going to hear about some of these today, and how they might relate to Korzybski's general semantics.

Thank you.

DEVELOPING AN EDUCATIONAL-HEURISTIC
ORIENTATION IN THE EVOLUTION
OF 'GENERAL SEMANTICS'

Elton Stewart Carter

In ['What I Believe'] . . . which he wrote during 1947 and 1948, Korzybski has summarized his life's work, his conclusions, his hopes, in a quite remarkable way. In these twelve pages we have what we may consider Korzybski's 'testament'--a bequest to workers concerned with human welfare in all the sciences and arts. I look upon it as a challenge and a program for future workers endowed with creative imagination who will take the foundations Korzybski has left us in time-binding, the non-aristotelian system and general semantics, re-formulate the theories and practices of their specialties, generalize them to a higher-order 'science of science'--or, if you prefer, an inter-discipline discipline--to cover the whole of human life and the potentialities of time-binding. That is looking far far ahead--twenty-five, fifty years perhaps. (Underlining not in the original.)

M. KENDIG 1950

CONTENTS
AND COMMENTARY

Frontispiece

An abduction from 'A Memoir: Alfred Korzybski & His Work' by M. Kendig (in Korzybski's Manhood of Humanity, Second Edition with Additional Materials, p. xxxviii).

The reading or re-reading of this entire Memoir in conjunction with 'What I Believe' by Korzybski (ibid., pp. xli-lviii) is strongly recommended as prelude to the present discourse, particularly Kendig's re-emphasis on time-binding and Korzybski's emphasis on self-reflexiveness (e.g. p. lv, including the footnote).

FIRST INTERLUDE

A memorandum to the 'producers': a strange interlude designed to 'set the stage' of expectations with a Bois-related re-emphasis on self-reflexiveness; a keyserian perspective on perspective-- and on freedom

PROLOGUE

Heuristic devices barely introduced; personification of 'G.S.' as a first example. Korzybski, five of his precursors, and a few other time-binding 'playwrights' with potential roles indicated. A relative absolute both postulated and hypothesized

SECOND INTERLUDE

Counterparts of multi-ordinal functions extended by trans-formulation and shown in the positional notations of a heuristic (plausible) matrix-fundamental in the present discourse. Indebtedness to Bois, Keyser, George, Ward, Einstein, Korzybski, Polya, Bertalanffy, Weiss, Wolchonok, Langer, et al., barely indicated. Unfinished business found in our own self-reflexive balliwick-- a challenging prospect

PROLOGUE CONTINUED

'Determinacy in the gross despite indeterminacy in the small . . .'
in the perspectives in the making of both life sciences and
living art--a heuristic exercise pointing toward an open-
ended educational hypothesis

THIRD INTERLUDE

Tragedy as a heurism in relation to both our own expectations and
our own motivation, pointing toward our own domain of freedom
in action

PROLOGUE CONTINUED

Langer's acts proposed (with various mini-transformations including
interrogational functions) to subsume semantic reactions;
predictable directions and endlessly fascinating opportunities
to exercise the freedom of unpredictable acts of the 'finer
grain size'

FOURTH INTERLUDE

Langer's acts--growing and evolving in Langer's Mind--glimpsed in
the scope of '. . . a comparative physiology of biological
science 1967 and arts 1967'; implications thereof for us to act.
. . . A questioning of 'the law of human progress' considered
as a propositional function, to be compared with a different
propositional--or interrogational--function; implications of
over/under defining the two terms involved in the two different
postulates and thus a clue pointing toward a possible 'tragic
flaw'. An instrument-personified introduced and nominated to
play a leading role in bursting through the current abstractions
of our balliwick; her structural metaphysics presented in multi-
ordinal conformation, with heuristic potentialities suggested.
Answers not depreciated and stupidity once avoided

PROLOGUE CONTINUED

. . . But not for long: a swift 'ending'

CURTAIN INTERLUDE

A courteous resignation interrupted by an act of leaving

FIRST 'EPILOGUE'

An 'aperspective' et cetera

FIRST INTERLUDE

TO: M. KENDIG AND CHARLOTTE READ
 FROM: YOURS TRULY
 SUBJECT: QUOTATION (supra) and your letter of 11 December 1972

Your invitation to participate on a panel 'preparatory for the Korzybski Centennial 1979 . . . instead of an individual A.K. memorial lecturer' has been evaluated as highly complimentary if not flattering: I have decided to 'look upon it as a challenge,' to thank you for the compliment by accepting both your invitation and the challenge of it, with the understanding among the three of us that the only constraint on my keyserian 'intellectual' freedom must be determined only by my own time-binding limitations in my own transactions given the 'logical' fate of previous formulations. This caveat, expressed in keyserian terminology, may help us achieve and maintain at least a semblance of 'minimum expectations' while in pursuit of excellence with 'maximum motivation'.

If this memorandum appears as a strange interlude and, even stranger, included here, then '. . . read on.' For that quotation from Kendig 1950 taken in conjunction with my latest decade of experiences yields some pertinent introductory queries and comments:

If I presume to classify myself among 'future workers endowed with creative imagination' and proceed, as M. Kendig 1950 envisioned, by reading her map carefully and following its implications both fatefully and faithfully, from where could I depart and in what direction should I plot my discourse? This query implies, to me, a host of serious possibilities. As you know, I am presently serving my seventh year as a graduate dean and have not for ten years taught any courses other than those called 'General Semantics'. This graduate dean evaluates his position as one in which the incumbent must recognize that his ignorances are almost equally distributed among the arts and humanities, the sciences and technology, and the disciplines of various professional fields. Along with elementary school teachers, graduate deans have been characterized as 'the last of the generalists'. Complimented by both the association and the characterization, I proceed to ask myself: What may I choose legitimately as my specialty? General Semantics? If so, then adopting Kendig's challenge may be transformed by interpretation to read as follows:

. . . Take the foundations Korzybski has left us in time-binding, the non-aristotelian system and general semantics, re-formulate the theories and practices of

'GENERAL SEMANTICS',

generalize [it] to a higher order 'science of science'--or, if you prefer,

an inter-discipline discipline--to cover [not alone] the whole of human life and the potentialities of time-binding.

(Incidentally, I do prefer 'inter-discipline discipline'.)

Could I adopt such a challenge and if I could, should I?

Now I shouldn't even if I could; but we could and, in my judgment, we should adopt the Kendig challenge dated 1950--but only if we re-invoke the very 'insistence . . . on the major importance' of the third so-called premise of Korzybski's system which J. Samuel Bois did 'not recall' as receiving 'much insistence' on Korzybski's part: Self-reflexiveness ('The map is self-reflexive'), 'a premise which, by the way, you see seldom discussed in most books commenting on [Korzybski's] methodology.' We may recall that Bois quoted Charlotte Read in this context (Breeds of Men: Toward the Adulthood of Humankind, 1969, pp. 131f), where he also reported a translation of the third premise: 'The map is not a map, but a mapping of the mapper mapping both himself and the territory.'

Neither Bois, apparently--nor this student of his advanced seminar 1953 and adopter of his . . . Awareness books as texts--subscribe to what has been called 'the dogma of immaculate perception'; but if we maintain awareness of Charlotte Read's paragraph about 'the observer' as 'an integral part of what he observes . . .,' quoted by Bois, then our writing occasionally as if we had forgotten that 'the map is not a map, but . . .' may facilitate communication toward a sufficient insistence on the third so-called premise. Instead of re-quoting Charlotte's paragraph, I prefer a similar doctrine for the present context quoted--but with my own emphases--from R. D. Carmichael's Logic of Discovery:

Neither the authority of man alone nor the authority of fact alone is sufficient. The universe, AS KNOWN TO US, is a JOINT PHENOMENON of the observer and the observed; and EVERY process of DISCOVERY in natural science OR IN OTHER BRANCHES OF HUMAN KNOWLEDGE will acquire its best excellence when it is in accordance with this FUNDAMENTAL principle.

Now take that (which Korzybski quoted in his Science and Sanity, p. 368, words capitalized by me) in conjunction with Korzybski's statement (ibid., p. 381): 'The term "abstractions of different orders" is, in this work, as fundamental as the term "time-binding" was in the author's earlier Manhood of Humanity' and we own, in my evaluation, a potent reflection of emphasis on the major importance of self-reflexiveness. What Bois did not recall from his notes and memory of Korzybski's seminars may exemplify 'abstractions of different orders'--Korzybski's or Bois' or both. If Keyser were here he might recall having written that 'the next to the most difficult thing in the world is to get perspective; the most difficult is to keep it.'

We--any one of us--may falter yet remain dedicated to both getting and keeping perspective while devoting ourselves to perspectives in the making. Note the self-reflexive structure of the abstractions of different orders in that statement of dedication. Note also the variable 'we'.

When yours truly needs to remind himself of his limitations, the pronoun 'I' serves well enough; but when he needs to motivate himself (self-reflexively)

to meet his most challenging assignments, the plural works much more effectively than 'I'. The use of we reminds 'me' of the giants of my career on whose shoulders it remains my privilege to stand along with each of you and other colleagues standing on the shoulders of the giants of other careers. Under these conditions, neither 'intellectual' snobbery nor any other species of snobbery has any place in our theater of operations. Let freedom reign, we declare, freedom unencumbered by deference to great time-binders, freedom to participate, to improvise, to innovate; let freedom reign among not only the thespians of our forthcoming dramatic production but also--working together with them in our play--let freedom reign among the playwrights, producers, and audience participants. We have resolved to exercise freedom in the invited yet self-appointed role of interim or acting director with a challenging responsibility for creating and manipulating semantic environments conducive to the creative endowments of the various participants.

PROLOGUE

If devices placed in the service of discovery, re-discovery, or invention--especially those designed to sustain and promote self-perpetuating investigation and learning compounded by learning HOW TO LEARN--may be classified after G. Polya's Modern Heuristic as Educational-Heuristic devices, then my personification of General Semantics could be entertained as an example of such.

Let General Semantics personified be called G.S.-K.

G.S.-K is not G.S.L.B. or G.S.P.W. (General Systems of Ludwig von Bertalanffy or General Systems of Paul A. Weiss); nevertheless, these two have been selected by the acting director 'to join the playwriting cast of our drama' about time-binding--so to speak--'to play supporting roles.' Another important character in developing our production, Susanne K. Langer, will be invited to 'play the part' of Philosophy in a New Key; she has written an essay which 'has arisen out of a previous book, Feeling and Form, which in turn arose from a predecessor, Philosophy in a New Key.' Her essay includes 'the Act Concept and its Principal Derivatives;' 'the Evolution of Acts;' and 'the Growth of Acts.' Mind: An Essay on Human Feeling also includes 'A Chapter on Abstraction' and a chapter 'On Living Form in Art and Nature.' The "'keynote" recognized and stressed' in that first book 'is the concept, dominant in twentieth-century philosophy, of symbolism as the characteristically human element in cognition, and the great departure from animal mentality which symbolic expression and understanding have effected.' By her recognition of the new key in which Charles Peirce, Sigmund Freud, Ernst Cassirer 'and several others pitched the compositions of their thought,' Langer 'was led to the concept of art as the symbolic expression of an artist's knowledge of feeling (a very different thing from symptomatic expression of currently felt emotions), which is the pervasive theme of Feeling and Form' where she elaborated 'an epistemological concept proposed and developed by Cassirer in his Philosophy of Symbolic Forms.' Thus we may discover epistemological implications built into Langer's role.

The choice of 'K' to personify G.S. offers many implications, including at least a few profound implications for the actors to be cast in this particular production and for the playwrights, directors, actors in other plays, and the responsible critics in our audience--not to mention the self-appointed critics and other laymen who may buy tickets and come to 'enjoy' the show more as spectators than empathic participants. The producers (M. Kendig and Charlotte Schuchardt Read) and 'their' acting director of our forthcoming play share with the non-laymen the knowledge that A.K. exposed himself to innumerable influences; but among those playwrights in whose plays he participated at least vicariously must be included at least five precursors, namely A. Einstein, C. J. Keyser, H. Poincaré, B. Russell, and A. N. Whitehead. Mathematical Physics, Mathematical Philosophy, Mathematical Heuristic, Mathematical Logic--these labels may serve to remind us of certain time-binding capital invested by Korzybski.

Let Korzybski's total time-binding investments compounded by subsequent investments of the wealth of humanizing knowledge, and earnings on reinvestments of capital gains, mark the generation point where we may begin to prepare ourselves for developing together a production which we--not 'I'--are directing toward a celebration of the Korzybski Centennial 1979. All of us who decide to participate may not yet act in our production because the script for that play has not been finished. Our producers have scheduled the production for 1979. Our assignment here and now (according to your acting director) is to participate in developing that play. It will surely be presented as a theater-in-the-round production where the actors will be surrounded by audiences (note the plural) including those several actors in 'other' plays, a few directors and playwrights and critics, and countless 'laymen' among whom will be the several self-appointed critics.

Each of you is cordially invited--we request the pleasure of your company--to participate, beginning here and now, in the making of what we hope will earn recognition as a well-made play.

If our play becomes worthy of an indefinitely-long run and we bequeath its wealth of learning to generations of humankind yet unborn, we could do Korzybski no greater honor. In order to accomplish that, we postulate and hypothesize an educational-heuristic orientation as absolutely necessary: necessary in spite, if not because, of conditions now or then or thereafter. We said necessary; we did not say 'sufficient'.

SECOND INTERLUDE

We envision with Bois a 'post-korzybskian General Semantics' evolving 'toward the adulthood of humankind.' Between now and the Korzybski Centennial 1979, the participants in our G.S.-K evolutionary movement constitute a task force to write the script of our forthcoming Centennial celebration. Here and now 'I' presume to undertake the role of the acting-director of the playwrights.

What 'I' envision for your consideration may become known eventually as the interrogational, educational-heuristic system-function of post-korzybskian General Semantics? If so, the most distinctive kind of activity among those time-binders called 'general semanticists' may emerge in conjunction with perspectives in the making; for they would become heuristic epistemologists, practitioners of systematic inquiry, guiding if not governing themselves by the developing modus operandi of educational-heuristics as an inter-discipline discipline of the sciences and arts, etc.

The multi-ordinal structure of educational heuristics may as well be formulated (trans-formulated?) in terms of acts in the play we are designing. Acts must be taken here as an undefined, multi-ordinal term--as postulated or hypothesized variable. Thus sub-acts in the play will be called scenes and super-sets of acts as elements of acting will be called transactions which, in various combinations, may be called roles, characters; theme, plot; drama or theatre; etc. Thus, unencumbered freedom of expressions to follow.

Now, to set the scenes, we propose and present a skeleton-structure of educational-heuristics, a perspective on perspectives in the making:

A MATRIX FOR PLOTTING EDUCATIONAL-HEURISTIC PLAY

	<u>Scenes of Act 1</u>	<u>Scenes of Act 2</u>	<u>Scenes of Act 3</u>	<u>Scenes of Act . . . n</u>
A. Variables	Constants	Variables	Interpretations	
B. Propositional Functions	Propositions	Interrogational Functions	Interrogations; e.g. questions; nul hypotheses; etc.	
C. Doctrinal Functions	Doctrines	Heuristic Functions	Heurisms	
D. System-Functions	Systems	Research-Functions	Research designs for investigations; designs for explorations; etc.	

Let the set of each intersect (e.g. A_2) be called an element: each and every set in our matrix is known to us as an elementalistic term; i.e., as interpreted here, we attribute to each term the splitting verbally of what cannot be split except verbally. Now we suppose that each element's vagueness can be delimited adequately in context by invariably-partial descriptions of whatever each of the sets of terms are postulated or hypothesized to represent; but the ambiguity--the deliberate ambiguity--of each element in our matrix can be resolved either (1) by interpretation (e.g. 'fixing a variable') in keyserian-hypothetical, verbal-to-verbal situations, or (2) by means of coincident-observation (tantamount to factual determinations) in keyserian-categorical, observer-observed-mapping operations. Whenever both of these are worked in cyclic combination we have transactions such as those described by William H. George in his Scientist in Action where the interplay of science and

mathematics is being directed by someone practicing the art of scientific investigation--the antithesis of THOBbery, comparable to the intensional orientation known to us through Korzybski. 'Thob' was invented by Henshaw Ward from the TH of 'thinking', the O of 'opinion' and the B of 'believing'. The Thob, he said in effect, is not even curious about the prospects of investigation; inquiry is a 'characteristic left out' of the making of thobbing abstractions.

Heuristic orientation emphasizes inquiry.

So let's inquire about the elements of our matrix. Each may be understood at least partially by means of the multi-ordinality of 'variable'. Let the 'x' of 1A be called a variable; an undefined term. Move to 1B. Here we classify: 'x is a commandment of the decalogue' (Keyser's example), as a propositional function. This statement-form is neither true nor false but ambiguous. In the context of this form (where 'decalogue' represents the limited vagueness of the propositional function, limited to the range of admissible constants or interpretations), 'x' represents any one of exactly ten commandments. Take any one; e.g. 'Thou shalt not kill,' and substitute that commandment for 'x'. Now you have moved to 2B where your proposition 'Thou shalt not kill is a commandment of the decalogue' appears, and where you may know it as true according to scripture. You transformed the given propositional function into a proposition by interpreting its variable 'x'. If you had misinterpreted that x in its 'decalogue' context by substituting 'Thou shalt not drink wine,' the proposition thus derived could make sense (at least to the tetotalers of the Women's Christian Temperance Union), but it is not true.

'Propositions' are defined by means of the undefined terms 'true' and 'false'.

Now if observation of the actual (non-verbal) is required to determine the truth or falsity of any proposition, Keyser classified that proposition as categorical: map-territory relationships. But if the decision of truth or falsity depends on map-map (verbal only) relationships, then Keyser classified those propositions as hypothetical. Categorical propositions call for extensional procedures; hypothetical propositions call for intensional procedures. Both extensional and intensional self-reflexive procedures are necessary--indispensable--to at least the scientist in action and probably to any time-binder in action including artists . . . to all sorts of actors and doers engaged in civilization-building activities.

Your chosen commandment of the decalogue exemplifies what are called constants (2A), another name for one-valued variables. If I ask you (as Keyser did ask), 'What is the length of a burning cigar?' then you could (1) spot the variable 'length', (2) classify my query as an interrogational function of the categorical type, (3) select a standard with countable units, say a ruler, (4) make a coincident observation of the cigar at a specified time in comparison with the units marked on the ruler (measurement), and then (5) make a statement of fact to report your answer--not to my interrogational function but to your question to be answered by measuring the cigar. Although the word 'length' is called a variable, it is not the word--but the burning cigar--

which varies in length. As I wrote over twenty-three years ago in my dissertation--and what I wrote has not changed: 'Words do not change their meanings; people change the meanings of words.' Paraphrasing and generalizing Einstein's response to a query about the laws of mathematics: 'Insofar as symbols pertain to reality, they are not certain; insofar as they are certain, they do not pertain to reality.' Not certain, in part because: Languages per se are not dynamic but static--without such invariant constancy of korzybskian extra-neural formulations, time-binding would have been as unimaginable as that cigar burning without its length changing--yet measurable at any time during its existence. Remember as we proceed that every element in our matrix is dependably static, but we are not.

So we proceed to doctrinal functions (1C), exemplified by the form of euclidean geometry which Keyser transformed into 'euclidean algebra' to show that the structure of doctrinal functions remains invariant under mathematical transformation. Every form or structure at this level of abstraction which satisfies the mathematical or logical requirements of pregnancy, compendence, and compatibility was labelled by Keyser, 'postulate system'. Suffice it to say here that doctrinal functions are constituted by a matrix of propositional functions called a system of postulates, taken in conjunction with their theorems, thus representing a dual super-set of variables 'of higher order' and owning doctrines (matrices of propositions) as their values 'of higher order'. Each and every doctrine inherits the form of its functional mother, invariably, by virtue of keyserian logical fate. Our freedom comes with our choice or creation or design and formulation of the postulates and the theorems, together with the postulating of relationships which we set by postulating the postulates and deriving the theorems.

I accept the doctrinal function of Keyser, and generalize the system function of Sheffer. (Korzybski, 1933, p. 94)

. . . if we take any system, an analysis (sic--analyst) will discover that it is a whole of related doctrinal functions. (Ibid., p. 145)

But, Korzybski wrote further: 'At present, the doctrinal functions and the system-functions'--of General Semantics?--'have not been worked out . . . ' (Ibid., p. 146). Assuming that my interpretation--'of General Semantics'--is correct--as the contextual structure surely implies--then we may confront ourselves with a great deal of unfinished business. While we are plotting our way toward finishing that business, we may as well include the homologous task of formulating what I have chosen to name the interrogational functions (3B), the heuristic functions (3C) and the research functions (3D). Not before we have 'worked out' these formulations should we expect to imagine the time-binding potentialities of the self-reflexive scenes of Act . . . n (especially C and D) 'to cover the whole of human life and the potentialities of time-binding.'

What we envision on our way toward working out a plot for our play may be indicated and exemplified as follows: by 'translating' key terms of keyserian doctrinal logic into heuristic terminology (underlined in what follows) and thereby formulate a simulation of Keyser's summary of doctrinal

functions (in his Mathematical Philosophy, pp. 130f). This particular kind of 'paraphrasing' shall hereafter be known as transformation; for instance:*

Any heuristic function is composed of (at least?) two sets of interrogational functions: an hypothesized set--fertile, compendent, compatible, sometimes independent (keyserian-hypothetical), sometimes keyserian-categorical (extensionally 'oriented')--called a format of interrogations; and another set of interrogational functions deducible (abductible?) from the format of interrogations and called interrogative-forms--analogous (isomorphic?) to the theorems in a doctrinal function.

An autonomous (keyserian-'hypothetical') heurism--a heurism derivable from a heuristic function by replacing the variables in the interrogational functions with admissible interpretations--is composed of (at least?) two sets of interrogations: a set derived from the format of interrogations--one from each format; and a set similarly matching the interrogative-forms.

A heuristic function is, like the interrogational functions composing it, neither efficacious or inefficacious (cf. the truth or falsity of keyserian propositions); and a heurism derived from it, is MORE OR LESS, like each of its component interrogations, either efficacious or inefficacious--NOT to be identified with 'effective or else ineffective'!

A heuristic function potentially gives rise to an infinitude (indefinitely many) more or less efficacious heurisms--POTENTIAL values of the heuristic function--and an infinitude of more or less inefficacious heurisms. [The 'more or less' is a function of the self-reflected PLAUSIBILITY of efficaciousness (Polya).]

A heuristic function, owing to the presence of the variables in its interrogational functions, has no specific or definite, but only an ambiguous or undetermined, domain of inquiry (analogous to Keyser's 'subject-matter').

'In respect to structure or form,' a heuristic function 'and all of the derivable' (abductible?) heurisms are structurally-similar (analogous to Keyser's FORMAL 'identical'), 'while, in content,' or domain of inquiry, 'no two of them are identical.'

In the case of heuristic functions, the interrogative-forms are logically deducible (psycho-physiologically abductible?) from the format of interrogations--the 'deduction' being 'purely' FORMAL; and that, in the case of any derived heurism, the interrogations matching their format cannot be logically deduced AS interrogations from the other interrogations AS interrogations but only AS FORMS . . .; so that, in any and all cases, it is the FORM of the format and the interrogative-forms, but never their domain of inquiry, that determines their logical (psycho-physiological?) consequences.

The heuristic function is known to us as a matrix, the heurism is one of the POTENTIALITIES (Keyser wrote 'things') for learning--and for learning HOW TO LEARN--which we may mould with it (Keyser wrote 'it moulds'); the heuristic function may be harmlessly equated with form, the heurism HAS form, and a domain of inquiry besides. . . . The heuristic function is known to us

*See APPENDIX

as a branch (or part) of 'pure' . . . heuristics (analogous to 'pure mathematics'); the heurism, a branch (or part) of 'applied'--rather, applicable-- . . . heuristics--that is to say, a 'mixed' heuristics, 'the mixture co-existing in the mingling or union of form and' domains of inquiry--or union 'of structure and something having it or conforming to it--[or union] of a prototype, model, mould, or pattern, and' POTENTIAL learnings 'owning the impress thereof.'

If the foregoing indicated vision of a version of . . . heuristics cannot become known to us as potentially educational in developing our interdisciplinary discipline of time-binding activities, then I do not know a more suitable qualifier; hence, educational-heuristics.

We hesitate to convert the adjective 'educational-heuristic . . . ' to a noun, but, like times-binding (Bois), we may remember its plurality and proceed to resist if not avoid objectification by means of heuristic orientations. May we consider educational-heuristics as a candidate for the self-reflexive office of modus operandi for General Semantics given, and taken, as the incumbent modus operandi of non-aristotelian systems?

Educational-heuristics will remain unfinished--unless and until the doctrinal functions and the system-function of General Semantics are 'worked out' both within and among domains of inquiry thus far slighted in the historical perspectives of our own endeavors. By virtue of developing our own educational-heuristic orientations in the evolution of 'Human Engineering', of 'Humanology'--including, of course, the 'Anthropometer or Time-binding Differential'--and of 'General Semantics' with its Structural Differential, we may enhance, cultivate, and invest our curiosity by wondering into explorations of potential awareness waiting for us in the extra-neural deposits of time-binding investors such as Ludwig von Bertalanffy and Paul A. Weiss; such as Louis Wolchonok and Susanne K. Langer. General Systems researchers and theory builders are working out--What may we say, system-functions? Philosophers--at least those who are working in harmony with Langer's 'new key'--are developing formulations of potential import for those of us who would compound the learnings of artists and philosophers of art (e.g. Langer) as well as mathematicians, mathematical philosophers, scientists, technologists, and--yes--even so-called General Semanticists? If and when explorations such as these yield a viable and fertile return on our investments, then we may be able to set that centennial stage with suitable furnishings and provide a script for each scene of every act in the play sufficient to launch even the 'research functions' of our matrix. If so, then the acting playwrights might cast themselves as actors trying out for parts in not only the centennial play but also for roles to play in subsequent performances. Self-reflexively speaking, at least one of those actors must play the role of a next-generation playwright. And acting-directors--like acting-playwrights--are no less mortal than the Socrates of that famous syllogism.

PROLOGUE CONTINUED

If we have not discouraged ourselves yet, through the second interlude, then permit 'me' to call your attention to the phenomenal time-binding achievements of the biologist who asserted that 'science . . . increasingly succeeds in documenting the freedom of parts within canons of order and thereby certifies, as it were, on scientific grounds, the opportunity for self-improvement . . .' (Paul A. Weiss, Life, Order, and Understanding: A Theme in Three Variations, 1970, p. 143):

The common theme . . . is the recognition and scientific validation of the rule of order that pervades the universe and culminates in human understanding. (Ibid., pp. 14f.)

Now consider the following--first, as examples of doctrines, and then, second, as examples of heurisms.

The primordial 'element of life' must be visualized not just as a blob of organic matter, but as a system of interdependent processes resulting from orderly interactions in organic matter. (Ibid., p. 137)

. . . For we have learned that, speaking concretely, the very antithesis 'determinate vs. indeterminate' is spurious. (Ibid., p. 102)

The dynamism of organization is dualistic. (Ibid., p. 82)

The example of twinning is just one illustration among many for the thesis that strict determinacy (or invariance) of a collective end state is fully reconcilable with indeterminacy (or variance) in detail of the component course of events leading up to it. . . . (Ibid., p. 42)

I could go on to confirm the validity of this principle of determinacy in the gross despite demonstrable indeterminacy in the small for practically any level and area of the life sciences. (Ibid., p. 74)

The essence of creation lies in the imaginative recombination of old elements to constellations of striking novelty of order, rather than in the addition of new basic elements--in man's mind as well as in evolution. (Ibid., p. 136)

When the relationships between the eye, the object, and the picture plane are fixed, there can be one and only one perspective. If there is the slightest change in the relationship, there is a corresponding change in the perspective. (p. 121), LOUIS WOLCHONOK 1961

This last quotation was planted at the end of the series of quotations from Weiss deliberately to show a similarity of structure between the formulations of a biologist and the statement by the author of The Art of Pictorial Composition (also, Design for Artists and Craftsmen and other works). Do you perceive any such similarity? Here are a couple of clues:

Art is the mold of feeling as language is the mold of thought.
SUSANNE K. LANGER 1965

Elements in art have not the character of things, but of acts. . . .
The dynamism of life lies in the nature of acts as such; it is incorporated in their structure and gives them their typical form.
(pp. 202; 291), SUSANNE K. LANGER 1967

Now displace the variable 'art' in both clues with the variable 'science'. Thus, Science is the mold of feeling . . . ; Elements in science Have you changed the form or structure of Langer's propositional functions? If we agree on the interpretations of the variables in my just-stated interrogational function, then we could share one and the same question; and the correct answer to a question which I derived is 'no'. If you accept my answer, we can agree that both the art and the science versions 'make sense' (more precisely, if the art version made sense to us, then the 'science' version could make sense to us) and, if so, the pair of admissable art and science sets of constants have been postulated and may be taken as givens.

Given Langer's statements in conjunction with our reformulated versions of those same two propositional functions, and given the doctrinal formulations of Weiss, take the super-set of these three sets of statements: Taken collectively, as it were, do they constitute a keyserian postulate system? Are they fertile? (Yes.) Are they compendent; i.e., do they 'hang together' just like the postulates, say, of euclidian geometry, logically concatenated? (More or less.) Are they compatible? (Strikingly so, to me, at first blush of excitement.) Are they both compatible and independent? (More or less compatible because they are interdependent?) Are they both compatible and categorical in the keyserian (G.S.-K-extensional) sense? (More or less compatible and most assuredly categorical or extensionally oriented, most assuredly established or to be established--or to be dis-established--by means of coincidence observations to be made in Keyser's realm of the Actual.)

Is it only the Scientist in action who is qualified to make all of those coincidence observations? In The Scientist in Action, William H. George asserted that science is not based upon measurement; but, on coincidence observations--not all of them quantifiable. We know all kinds of coincidence observations, however, as structurally observable; i.e., as 'joint phenomena of the observer and the observed.' Does such knowing--and knowledge of the knowing--exclude, preclude or excommunicate all save the scientists? How about the artists? The humanists? All sorts of laymen including, perhaps, many if not all of us? Please pardon me for my interrogational functions. While you proceed to interpret them and achieve provisional answers to your questions, I shall proceed as if my interrogational functions were rhetorical: suggestive, biased perhaps; self-reflexively convincing?

While remaining in my heuristic mood, let me direct your activity further: Displace every one of the periods in each and every quotation from Langer and Weiss--but not yet Wolchonok--with a question mark. Then consider your symbol reaction: Did you change your perspectives in relation to each set of statements taken one by one, distributively?

I assume so, and proceed to direct your activity to higher orders where we may inquire: Taken collectively--all-at-once, as it were (just as if each question-marked set of statements were a component in a single pictorial composition, as Wolchonok might say (to be viewed as if it were not discursively structured) and look at the entire perceptually imagined super-set of question-marked quotations presentationally, like Langer (in Feeling and Form) observing a painting, perceiving it as a whole. If you are able to 'see' our matrix this way, then you may be able to 'visualize' the quotations--either version, didactic or question-marked--in a similar way.

Now compare your two presentations-to-yourself; i.e. search for the differences among the similarities; and the similarities among the differences between (1) your question-marked, structural abstractions from the Langer and Weiss quotations and (2) our matrix. When comparisons such as this have been worked out--played through--we may expect some novelty of order and of perspectives to emerge. In any eventuality of some such endeavor, we might learn something, learn how to learn something else, and so on ad infinitum; for we have been and would be playing around with perspectives in the making. And the developing orientation of our creative participation is not extensional or else intensional, but both: self-reflexively heuristic. The compounding of the heuristic orientation, by means of its multi-ordinal heuristics, exhibits some time-binding potentialities for educational investments: This we hypothesize.

THIRD INTERLUDE

Among those perspectives we are making I expect the discovery of at least one 'tragic flaw' in G.S.-K--the 'tragic hero' of our forthcoming heuristic play. Furthermore, we should expect that flaw to emerge from at least one G.S.-identification, an inadvertent equating-with-allness of at least two orders (levels?) of abstraction, an identification which tends to split G.S.-K, elementalistically, and thereby present a pervasive 'internal' tension remaining to be resolved.

We should proceed with 'minimum expectations'--together with 'maximum motivation,' of course!--and I must say right here and just now that our play has been developing into a tragedy which the authors must own as a plausible if not a probable eventuality and then proceed accordingly:

. . . The artist's dialectic is not of ideas in the abstract but of ideas in action, ideas as lived. His dialectic is not so much with words as with lives, and his focus is not so much man thinking as man acting, man 'on the way.' Where the philosophers and moralists would generalize on experience, find unity in multiplicity, and reduce experience to viable categories and prescriptions, the tragic artist explores each experience directly, de novo, for whatever it may reveal about man's capacities and possibilities. He presses the 'boundary-situation' for its total yield. (RICHARD B. SEWALL, 1959, pp. 6f.)

Without a sense of the tragic, comedy loses heart; it becomes brittle, it has animation but no life. Without a recognition of the truths of comedy, tragedy becomes bleak and intolerable. (Ibid., p. 1)

Each age has different tensions and terrors, but they open on the same abyss. If each new artist's primary source must be the data of his own experience and observation, he just as surely learns from his fellow artists who have stared into the same depths. What they came up with, the statement of their fictions, constitutes the tradition--a total evaluation expressed in a literary form. As the tradition guides the new vision, the vision tests it, alters its focus and directs or expands its compass. Direction and focus may change, but the vision is constant. (Ibid., p. 8)

So, we hypothesize Sewall's vision of tragedy while resolving to recognize 'the truths of comedy' in order to prevent our developing tragedy from becoming 'bleak and intolerable'.

More than Prometheus or Oedipus, Job is the universal symbol for the western imagination of the mystery of undeserved suffering. . . . The history of the universe for the Christian is in principle already told. For the Jew history is in the making. . . . What would break lesser folk--the Counselors, or the members of the chorus--releases new powers in Job. His compulsion toward self-justification sends him far and wide over all the affairs of men, and deep within himself.

. . . . Nothing is more revealing of Job's (and the tragic hero's) stature than the contrast which the Poet develops between Job and the Counselors. . . . He grows in stature as they shrink. He knows that he has achieved a vision, through suffering, beyond anything they can know. . . .

So far, the meaning of Job for the tragic tradition in this: A new dimension of human experience, a new possibility, has been explored and rendered probable. Vision, working on the raw materials of experience, has hammered out a form. New value has been found where it was least expected. . . . After this achievement by the Poet of Job and after the similar achievement of Aeschylus . . ., no subsequent artist whose imagination was attracted to this mode of writing could ignore it. (Ibid., pp. 9, 21 et passim)

Disaster is not tragedy; nevertheless, the outcomes of tragedy may perpetrate disastrous consequences.

Tragedy should be used only to describe the situation in which the divided human being faces basic conflicts, perhaps rationally insoluble, of obligations and passions; makes choices for good or for evil; errs knowingly or involuntarily; accepts consequences; comes into a new, larger awareness; suffers or dies, yet with a larger vision. . . .

Heroes and heroines [of tragedy], if I do not misread them, incorporate the dividedness of a humanity whose values, because they naturally elude the confines of formal logic, create an apparently insoluble situation. . . . For these heroes the two counterimperatives

have so much authority that no observer can say with assurance, 'It would be better if Hamlet or Antigone or Cordelia had done so and so.' Nor could a fully aware person, caught between injunctions that are apparently incompatible, come out of such situations without damage; he could be safe only by canceling part of his awareness. This canceling would surely threaten the common order more than the ambiguous act does. (ROBERT B. HELLMAN, extracted in Current magazine from 'Tragedy and Melodrama: Speculations on Generic Form' in the Texas Quarterly, Summer 1960)

If, as Hellman states, 'the pathological extreme of the tragic condition is schizophrenia--where normal dividedness is magnified into the split that is illness,' and if 'the pathological extreme of the melodramatic condition is paranoia . . . ' then our present challenge in the evolution of 'General Semantics' may be evaluated in terms of escaping or rescuing ourselves from between such extremes by Hellman's 'rare integration of powers that may be earned by long discipline' without becoming overly melodramatic in the process. If General Semantics is known to us as a 'long discipline' pertinent to earning that 'rare integration of powers,' then an educational-heuristic orientation invested in developing inter-discipline disciplines might help us help ourselves toward 'a larger vision' without becoming melodramatic.

Did you perceive Hellman's use of the term 'act' where he points out that the tragic hero's canceling part of his awareness for the sake of safety would surely threaten the common order more than the ambiguous act does? Now that act is not an Act comprised by the unfolding scenes of the play, but a lower level of abstraction which nevertheless remains pregnant with multi-ordinal potentialities to be developed as the fetus of invention grows. 'The dynamism of organization is dualistic . . . determinacy in the gross despite demonstrable indeterminacy in the small. . . .' The 'acceptance of the consequences' of taking tragedy as the primary heurism of our playwrighting roles and functions confronts us, by virtue of 'determinacy in the gross,' with the logical fate which was emphasized by Keyser. Our freedom of 'demonstrable indeterminacy in the small' depends on how we act:

PROLOGUE CONTINUED

. . . Elements in the continuum of a life . . . may be termed 'acts'. It is with the concept of the act that I am approaching living form in nature, only to find it exemplified there at all levels of simplicity or complexity, in concatenations and in hierarchies, presenting many aspects and relationships that permit analysis and construction and special investigation. The act concept is a fecund and elastic concept. It applies to natural events, of a special form . . . characteristic of living things. . . . Such events arise where there is already some fairly constant movement going on. They normally show a phase of acceleration, or intensification of a distinguishable

dynamic pattern, then reach a point at which the pattern changes, whereupon the movement subsides. That point of general change is the consummation of the act. The subsequent phase, the conclusion or cadence, is the most variable aspect of the total process. (Underlining not in the original.)

SUSANNE K. LANGER 1967, p. 261

How may we act in respect with Langer's acts? We don't know--yet.

Let's see. Langer says, 'An act may subsume another act, or even many other acts.' (loc. cit.) Transformed: Acts 'act' multi-ordinally and 'act' qualifies as a multi-ordinal term. Keyserian: 'Act' is a variable--but it does not vary. Introduce Weiss and reformulate: Acts (territorial) in the small vary unpredictably whereas 'Acts' in the gross remain (more or less) predictable by virtue of the invariance of relations--until that 'point at which the pattern changes . . . the consummation of the act.' Interrogational functions: May acts subsume semantic REactions? More abstractly, self-reflexively--What (if any) potentialities for changing our perspectives may we associate with or attribute to the generation of questions and then answers from that interrogational function?

Ladies and gentlemen of this playwrighting audience: Do you prefer reacting, however semantically, to acting?

We may hypothesize that both acts and semantic reactions own the 'characteristic of living things. . . . Such events arise where there is already some movement going on.' We are participating--aren't we?--in the G.S.-K 'movement'? In the gross: What direction of movement might we predict from the pattern of G.S. activities to date (assuming consummation not yet)? In the finer 'grain-size' (Weiss) of our activity: What should we do; what should we do next--conditionally--et cetera . . . , and how should we proceed in the growing and evolving of our acts? We don't know--yet. Unpredictable!

But fascinating, nevertheless, endlessly fascinating provided our willingness: (1) to reformulate didactic doctrines into heuristics by way of their respective functions and interpretations thereof, and then proceed (2) systematically (3) into the designs of our research functions and (4) their subsequent execution; and so on, and on. . . . In some such way we might make the scenes of our acts in the heuristic play of time-binding?

Despite . . . homeostasis . . . , acts do grow. . . . Acts grow in scope, in complexity, and in intensity, according to (1) their chances of implementation; (2) their organizing propensities, which depend largely on the opportunities they create for subacts to develop, and for lesser acts in progress to become entrained; and (3) the energy of their original motivation, which may be greatly enhanced by confluent impulses in the course of actualization. . . .

The growth of acts obviously leads to tensions and inadequacies which, in turn, produce changes of relative opportunity for different ways of exploiting the environment, of keeping the organism intact, and of procreating, perpetuating the stock. . . . At each

procreative juncture the conditions change. . . . (Langer 1967, pp. 415f)

Changes of situation motivate acts. . . . (Ibid., p. 423)

. . . More and more, then, behavior--the acts of an organism as a whole in relation to extraorganic conditions--comes to be guided and developed by feeling, which at this level had best be termed 'awareness'.

. . . The chief characteristic of behavior is the massive release of energy. . . . (Ibid., pp. 425f)

. . . Acts beyond the development of the matrix itself and its internal functions, that is . . . , the growth of behavior . . . arise, just as the organic activities do, out of the matrix; no external event can cause them except through its influence on the situation of the agent, in which external and internal elements intersect and interact. (Ibid., pp. 426f)

. . . 'Organic form' . . . appears in nature as it appears in art, and no matter how much scientific analysis may fragment it, every part still reflects and represents the whole. . . .

As elements in a virtual form (i.e. in a work of art) grow out of other elements, so in an actual living form acts are made by and from other acts. . . . Every act within an individual has to get out of the way of other acts which, nevertheless, are making its situation and perhaps implementing its advance to consummation. . . . (Ibid., p. 428)

Acts and ambients grow and diversify, reintegrate and shift to higher levels, together. That is the course of evolution. (Ibid., p. 442)

The activity and its mechanism evolve together. (Ibid., p. 404)

Every individuation, or ontogenesis, is an evolution. (Ibid., p. 371)

Every discovery makes the living organism look less like a pre-designed object and more like an embodied drama of evolving acts, intricately prepared by the past, yet all improvising their moves to consummation. (Ibid., p. 378)

FOURTH INTERLUDE

Langer's acts grow and evolve--How about our semantic REactions?

Langer's acts grow and evolve in living organisms, the organic form of which 'appears in nature as it appears . . . in a virtual form (i.e. in a work of art)'--How about our semantic REactions?

In Langer's Mind: An Essay on Human Feeling, abstraction in art, depth in art, design in art, formalization in art, growth in art, individuality in art, individuation in art, living form in art, movement in art, objectification in art, projection in art, realization in art, relationships in art, transcendence in art, translations in art, uniqueness in art, unity in art--all of these topics, among others, are discussed in conjunction with ' . . . a general change of intellectual focus from anatomy to physiology, that is, from the description of the myriad forms as such to their description in terms of observed, or imputed, or sometimes purely hypothetical functions.' One who has studied Langer's Mind might have learned the right to claim for us on her behalf that she has produced a comparative physiology of biological science 1967 and arts 1967. Painting, music, the dance and drama are included among her 'cast of characters'--How about our G.S. 'cast of characters' 1973? Or 1979? Or 1973-1979? Or thereafter?

Might we become aware, more--much more--aware of our need for philosophers such as Langer playing in her new key? If we have been perceived as if we were thobbing snobs who occasionally fail to practice what we teach (and preach?), perhaps we need to do 'A Way with Prejudice,' as Irving Lee suggested in another context.

If we decided to recruit, say, biological scientists such as a Bertalanffy or a Weiss, and philosophers of art such as a Langer, or a Wolchonok--Would we continue to project and impose the image of 'Science' upon scientists and artists alike; or the image of mathematics and mathematical philosophy upon both discursive and presentational symbol-makers alike? Would our deference to G.S.-K preclude a tragically-oriented reinvestigation of 'the law of human progress' according to which ' . . . the total gain made in T generations is $PR + PR^2 + PR^3 + \dots + PR^T$. . . given by the formula, Total gain in T generations = $\frac{R}{R-1} (PR^T - P)$? ' P for Progress, here; and 'R denotes . . . the ratio of Improvement--that is, the number by which the progress of one generation must be multiplied to give the amount of progress made by the next generation;' and 'T--the exponent of the function--'denotes the number of generations.' Have any of us found predictive validity (terribly 'scientific') in applications of that formula to generations of artists, for instance Beethoven and his musical progeny? Or to generations of composers in other media of human expression such as painters, sculptors, poets, novelists, playwrights? If so, we may need to know about it; for 'Whatever squares with that law of time-binding human energy, is right and makes for human weal; whatever contravenes it, is wrong and makes for human woe.'

(KORZYBSKI, 1921, pp. 90-92)

Shades of Professor Keyser who, Korzybski told me, 'spent incredible time editing, and in some places rewriting' Manhood of Humanity. Nevertheless, in his Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics, Korzybski states (p. 7) that 'I undertake the investigation of the mechanism of time-binding.' Did he--or anyone--undertake an investigation of the propositional functions in which 'Progress' appears as an undefined term? Might 'Progress' appear to us as 'over-defined (over-limited) by intension, or verbal definition, because of our belief in the definition; and . . . hopelessly under-defined by extension or facts, when generalizations become merely hypothetical'? (Ibid., 4th ed., p. lii in Introduction to the Second Edition) Were Korzybski's extensions--for instance, into science and mathematics--such that his generalizations became 'merely hypothetical'? And were 'extensions' with 'respect' to his 'philosophers' etc. (Ibid., 4th ed., pp. xxviiff) intended as keyserian-categorical propositions?

If Keyser wrote that formula, he very probably intended it to portray an ideal (analogous to mathematical limits in Keyser's works). If Keyser wrote it, the formula hovers aloft like a guardian angel to guide 'the pursuit of excellence, the proper vocation of man.' To the extent that the prototype of such excellence has been restricted to science and (1) 'mathematics as a language of a structure similar to the structure of the world' and (2) '. . . to the structure of the human nervous system,' then--to that extent, G.S.-K may have been tragically delimited?

Displace the 'P' for 'Progress' in that formula with a 'C' for 'Change'. Having done that: Do you feel well-prepared for an Alvin Toffler 1970 variety of Future Shock? If not yet, harvest from Toffler a fairly typical sample of examples of accelerating rates of changes and let your sample represent a partial (but perhaps adequate) description of what the variable 'change' represents; thus you may expect 'change' to remain 'underdefined by extension.' Only to the extent that you believe in your 'underdefinition' should you think-feel compelled to over-define it. Have you interpreted the propositional-function formula? If so, you have generated some propositions. Which of these propositions may be designated as 'true'? Which ones 'false'? Compare (1) the 'Progress' and (2) the 'Change' statements at both levels of abstraction, namely the propositional level and the propositional-function level. May we inquire now: Do you 'feel' '. . . caught between injunctions that are apparently incompatible,' caught in 'the dividedness of a humanity whose values, because they naturally elude the confines of formal logic, create an apparently insoluble situation?' And would you 'feel' 'safe only by canceling part of [your] awareness?' Would 'this canceling . . . surely threaten the common order more than [your] ambiguous act does?' If so, and to whatever extent you may decide, then you have permitted yourself to be directed into a tragic situation? And if, in that situation, you identified any two or more orders of abstraction, then your surprise in discovering 'tensions and terrors' may be taken as an indicator of your sensitivity of awareness with respect to your own 'tragic flaw'?

Once again, pardon me for my interrogational functions; and for casting you, temporarily, in the imaginary role of a 'tragic hero'. We confess playing the heuristic game, an act intended to lead, by the growth of our acts

to 'tensions and inadequacies which, in turn, produce changes of relative opportunity for different ways of exploiting the environment, of keeping the organism intact,' etc. But these acts must 'get out of the way of other acts. . . .'

Other acts? For instance, interrogative acts self-reflexively directed in inquiries about G.S.-K's career just as if that possible 'tragic flaw' of identifying changes with Progress in the formulation of time-binding--or of the ideal of time-binders--happened. If we have adopted the principle of 'whatever happens, happens,' then we should explore 'each experience directly, de novo, for whatever it may reveal' about G.S.-K's 'capacities and possibilities' like the tragic artist who 'presses the "boundary-situation" for its total yield.'

If now we find our Langerian-acts tragically oriented yet heuristically motivated in their growth and evolution, we may self-reflexively find ourselves on the verge of an invention. If so, let's press this boundary situation toward its POTENTIAL yield.

A civilization which cannot burst through its current abstractions is doomed to sterility after a very limited period of progress.
(Quoted in Science and Sanity, p. 2, from A. N. Whitehead's Science and the Modern World.)

What fashion of instrument do we need to 'burst through' the 'current abstractions' of General Semantics?

I should manage a symbol reaction to that interrogational function; I should resist any temptations of thobbery and focus my attention on the variable 'instrument' and then ask myself (and invite you to ask yourselves): What sort of device might serve as an interpretation of this multi-ordinal term, 'instrument'?

Consider, for instance, human languages--including mathematical symbols--from Irving Lee's point of view, namely an instrumental point of view. What are we doing with our symbols while we are orienting ourselves for learning? And for learning how to learn? And for not only self-reflexive but also self-motivated, self-perpetual, multi-ordinal, exponential, time-binding learning? Whenever--and to the extent that--we experience success in becoming thus oriented, could we find ourselves in the semantic state of a predominantly didactic, lecturing, self-satisfied mood? Wouldn't we find ourselves in a questioning and listening mood while more or less silent on the 'objective level'? If my transmitter is transmitting just now, I may switch it off intermittently--turn my receiver on intermittently and tune it, as best I can, to your transmitter's wave length; for I am going to listen to myself and invite you to listen in as I proceed now to introduce an old friend of ours. She was re-discovered, so to speak, under our noses. 'In the matter of escaping attention,' Keyser said, 'the very obvious is a rival of the obscure.'

Ladies and gentlemen of this playwrighting audience: not only are we honored by her presence--for she has probably incited more learning than any other linguistic symbol in the entire history of humankind--but it remains my

privilege to reintroduce Ms. Quark. The lineage of 'Quark' is told by H. Allen Smith in How to Write Without Knowing Nothing, pp. 27f. The name is used in cablese to stand for 'question mark'. Her given name is Multi-Ordinal. Her mother's maiden name was Inquiry and her father became well known as Research Quark.

Ms. Quark comes to us--without shame--as the acknowledged Queen of promiscuous Curiosity: Ms. Curiosity of our epoch. It gives me great pleasure to place her name, Ms. Multi-Ordinal Quark, in nomination for the office of Prime Interrogator. She has agreed to serve, if elected; and she has agreed to play the female lead, an artist in our play, the heroine--our (tragic?) hero's protagonist. If elected to this position: Will she be able to save G.S.-K from that dismal Whiteheadian perspective, the doom of sterility?

We don't know--yet; and therein lies the mystery of our plotting.

The evolution of our plot surely depends upon how we, serving as the playwrights, act and react as creative participants in designing our heroine's role:

The unexpected drama of such an enterprise is found, in that a non-aristotelian system, like its predecessor, involves full-fledged structural metaphysics of some sort, to be explained later.
(KORZYBSKI, Science and Sanity, p.44)

Shall we turn now toward some of the plausible 'structural metaphysics' which could become involved in our centennial enterprise and which we should have learned, with Korzybski, to expect? Using our presumed heroine's initials, M.O.Q., we proceed to guess and test our way into the designing of M.O.Q.'s role.

If we recall that Langerian-acts 'may subsume other acts'--hence the multi-ordinality of L-acts--and if we exercise our freedom to classify semantic reactions as L-acts constituting a sub-set of L-acts of higher order in Langer's hierarchy . . . , then we could compound the multi-ordinality of semantic reactions by means of the multi-ordinality of L-acts, self-reflexively and perhaps exponentially. Visualize concentric--not eccentric--circles: L-acts in the outer circle encompassing all sorts of semantic reactions as represented by the inner circle. Henceforth--unless otherwise specified--the term ACT, or ACTS, will be employed as thus visualized.

Next--unless some law presently unknown to us precludes the possibility of doing so--we may self-reflexively exercise our freedom again in the act of assigning M.O.Q. to the station of exponent where she will serve to represent her exponential function, which happens to be a most potent heuristic function, characterized by Gestalt Prägnanz, potentially fertile. Now let M.O.Q. be symbolized by '?' (which has been oversimplified from '??'--obviously!), and place that symbol as a 'positional notation' on the spot where the exponents are customarily located. Thus we have invented the 'ACT?'.

If 'ACT?' may be assigned to serve as a variable--an undefined term--then it can be employed, deliberately and imaginatively, in the generation of interrogational functions. For instance: What--if any--potentially-useful purposes might ACTS' be designed to serve in developing an educational-heuristic system-function in the evolution of 'General Semantics'?

Before proceeding further along the line of inquiries suggested by means of that interrogational function, we may recall that Bois diagrammatically represented the korzybskian semantic reactions and presented them 'in psychologies' to be taken 'as our working units of discourse' (The Art of Awareness, p. 39). Now, 'speaking about speaking' about human discourse, our invention named 'ACTS?' could, in educational-heuristic activities, be taken as our 'higher order' working units of exponentially inquisitive discourse. Thus we might encourage an orientation to emphasize didactic approaches less, and heuristic approaches more, in an endless array of evolutionary activities, wherever and whenever our perspectives do or should remain in the making.

Assuming that our multi-ordinal perspective (on perspectives in the making) remains in the making, we may act accordingly: If various ACTS? can be utilized in the making of interrogational functions, then interrogational functions can be formulated and interrelated in such a way as to generate various heuristic functions? And then, in turn, heuristic functions can be formulated and interrelated in such a way as to generate research-functions? Our research-functions may evolve into pedigreed breeding stock for the pro-generation of fecund research designs? Of fecund designs for explorations into domains of inquiry not yet matured to the status of the more rigorous investigations of 'scientific' research? Producing fecund heuristics? Generating questions and hypothesizing fecund questions about questions? Cycling around with Northrop's epistemic correlations, we ask in order to learn. . . .

Without depreciating answers--tragic heroes and heroines alike know that we need answers--we nevertheless recognize, with Keyser: 'A fool can ask questions that a wise man cannot answer.' Keyser also said: 'I trust we are not so stupid as to be able to answer all of the questions we are able to ask.'

No, we are not that stupid.

PROLOGUE CONTINUED

If we play-act our way toward a 'total yield', what will we discover, rediscover, or invent? We don't know--yet.

Let's see. . . .

. . . (End of prologue 1973).

Curtain Interlude

TO: M. Kendig and Charlotte Schuchardt Read, Producers

FROM: Yours Truly, Acting-Director

SUBJECT: Humility, 'An act of submission or humble courtesy' (Webster's Collegiate . . . Second Ed.)

I deeply appreciate your vote of confidence as evidenced by your invitation to participate as a panel member on this historic occasion. Herewith I submit the present remnants of my fictions and tender my resignation as acting-director of the playwrights. Yes, this 'act of . . . humble courtesy' is intended as getting 'out of the way of other acts which, nevertheless, are making [my present act's] situation and perhaps implementing its advance to consummation. . . .'

Where is Ms. Quark going?

FIRST 'EPILOGUE'

While 'indexing' and 'dating'--Etc.--our new Queen, Ms. Curiosity, I found out something indicative of how she may proceed to campaign for the office of Prime Interrogator. Apparently she couldn't wait any longer to get started. Based on what she told me, I can guess where she is going now: To the library.

We were discussing the self-reflexiveness of perspectives in the making in relation to the potentialities of her role (conditionally, of course, assuming that she would win the election). As we should expect, she asked questions, many questions, questions about questions, sets of questions (interrogational functions); we talked about doctrinal and heuristic functions, about some prospects of system-functions and of research-functions--and she inquired about these prospective levels of developments.

Needless to say, we could not answer most of her inquiries.

But we did explore some of the limitations of our present 'perspectivism'--using Bertalanffy's label for General System's Theory--in the context of Jean Gebser's discussion of 'The Foundations of the Aperspective World' (as translated by Kurt F. Leidecker and published in the November-December 1972 issue of the journal, Main Currents in Modern Thought). According to Gebser, in his '. . . looking . . . upon a new epoch of mankind in the making,' and in his reporting 'on the making of a new world, a new consciousness':

We shall have to show that indications of something new to come may be discovered in every field of human expression, and that all of these share a common character.

We are uncompromisingly dedicated to wholeness, and ultimately to the whole.

The whole, which can no longer even be approached from a perspective position, will, however, become once more approachable in fresh and novel ways from the aperspective attitude. . . .

In the designation 'aperspective', we . . . express a process of liberation from being perspective-bound as well as non-perspective or even pre-perspective-bound. . . .

The rational cliché of 'progress' . . . , the biological idea of evolution, and the botanical idea of unfolding, are not applicable to the phenomenon of consciousness. . . . In a way quite different from biological mutation, none of these mutations of consciousness is responsible for the loss of previous possibilities and properties, but suddenly incorporates them into a new structure. . . .

. . . Mutations in awareness . . . are integrational processes.

Enchanted by the notion that her self-reflexive multi-ordinality might serve not merely to 'burst through' the present abstractions of 'General Semantics'--but also the present abstractions of your acting-director (now resigned to make way for the developing ACTS[?] of Ms. Quark in what could become tragically-oriented transactions with G.S.-K and others in our centennial Play)--she may have gone to the library to exercise her promiscuous curiosity.

If so, who knows where she may be going next or what may happen there--after in developing . . . the gebserian integrational processes of aperspective perceptionsⁿ?

APPENDIX

A MATRIX FOR PLOTTING EDUCATIONAL-HEURISTIC PLAY;
 e.g., as in the numbered sequence of abstracting
 while reformulating doctrinal to heuristic functions

Scenes of Act 1	Scenes of Act 2	Scenes of Act 3	Scenes of Act . . . n
A. Variables	Constants	Variables	Interpretations (8)
B. Propositional Functions	Propositions	Interrogational Functions (2) (7) (13) (21) (4**) (11) (3*) (10)	Interrogations (9) (15)
C. Doctrinal Functions	Doctrines	Heuristic Functions (1) (6) (12) (16) (18) (20) (22)	Heurisms (5) (14) (17) (19) (23...Etc.)
D. System-Functions	Systems	Research-Functions	Research Designs

*3 represents 'Format of Interrogations'--analogous to postulate system--positioned to show a higher level of abstraction than 2.

**4 represents 'Interrogative-Forms'--analogous to theorems--positioned to show abduction from 3.

COMMENTS

ROBERT P. PULA

My first comment is 'wow!' [Chuckling]

I appreciate the fact that I have the advantage of having had Dr. Carter's brilliant paper in hand -- in fact, both hands -- and in my feet, nostrils and lots of other places for the last month or so. I think it has given me an advantage in being able to suspect my way to some of the conclusions that we might reach in relation to that paper. What I hope to do in the next few minutes is mention a few of the things that struck me as rather critical during my reading of the paper. Before I do that, though, I would like to respectfully suggest that everybody might want to stand up for about thirty seconds or so

All right -- the blood is flowing again and we can resume. I would like to first observe that since Elton has cast himself in the role of the fool, he has made my job easier. [Chuckling] The reason that I'm glad is that the worst thing that's going to happen now is that I'll increase the fool population by one. No doubt, I will at least work a little bit in that direction.

I would like to also -- before I forget -- make a promise to Elton and to all of you in response to his call for a little more production on the part of us 'experts' at semantic reactions, and that is that within the next thirty years, forty, maybe -- if I can do the Bois and Kendig thing -- I will keep working on a work in progress toward a non-identity therapy. The work will attempt to make more explicit a lot of what is implicit in Science and Sanity regarding socio- and psycho-therapeutic procedures. And I just say that as a kind of heuristic reaction.

A very important point is made in Elton's paper that struck me as perhaps a little contradictory. I would like to introduce it here because it has to do with the problem or formulation of self-reflexiveness and, although it wasn't brought up in Elton's summary presentation just now, it seems to me an important part of his paper.

In the first few pages Elton discusses the importance of the formulation of self-reflexiveness. I quite agree with him that it is a formulation that in many general semantics works is not discussed very fully. It's certainly a formulation which is usually slighted in seminars and classes on general seman-

tics. I suspect the reason is that for many it's a very difficult formulation.

I agree with Elton, also, that perhaps Sam Bois's translation or re-formulation of self-reflexiveness is a 'first' -- that when we make maps, we are not just making maps; that we engage in a process whereby the map-maker is mapping himself and whatever it is he may think is 'out there' at the same time. So it seems to me that self-reflexiveness points out a very important aspect of what used to be called 'the human condition', namely, that we cannot escape 'our' own brains, or 'ourselves' as brains. We cannot, as far as I can understand this formulation, transcend the self-reflexive operation.

Let me read what I have here which may seem a little clearer. If self-reflexiveness reminds us that we can never completely escape our own maps, that even the simplest awareness constitutes a mapping of ourselves, whatever may be 'out there', then how can we talk seriously about becoming 'aperspective'?

Let me read this passage from Elton's paper where the aperspective notion is stated:

The whole which can no longer even be approached from a perspective position will however become once more approachable in fresh and novel ways from the aperspective attitude.

The author who's being quoted here [Jean Gebser] suggested that we might try to reach a point where we become so free of our previous perspectives that we achieve an aperspective state, a state without perspective. I would simply like to suggest, and I hope I'm not sounding nitpicking about this, that the only way that I can understand that any humanoid can achieve an aperspective state would be through the two major modes of death -- namely, coagulation and liquefaction or disintegration.

I assume that protoplasm which goes into solution no longer can be said to have any perspective. It's in an extreme aquarian state. Okay? We have stressed so much in our general semantics work the problem of the coagulated protoplasmic mass, the person with a very rigid attitude, that in our flight

from this overperspectivized state, it seems to me that we often seem to be manifesting a thrust toward this aperspective state which I found Elton suggesting. I could only understand that in terms of organic death -- a consummation devoutly to be wished, according to J. S. Bach. But we don't have Bach's opinion post coagulation-cum-disintegration. (I assume that his hypothesis was tested, but not in a reportable way.)

The major death modes have their analogous life modes: Rigidity and aquarian fudge. Both -- and the healthier modes 'in between' -- constitute perspectives.

All right. Now what I'm going to do is whiz through a few things that I've noted here . . . in a paper-shuffling way . . . but also I think in a heuristic way. Let me, if Elton doesn't mind, look up heuristic -- as I'm sure any of you who had good sense did also before you came here if you saw the advance notice. Actually, I looked up heuristic some years ago because I met Elton Carter some years ago, and it turns out that it has to do with learning by discovery.

And, as Elton has stressed today, learning by asking questions. It's a very important shift, it seems to me, of focus, because we try to get away from this myth of the teacher, where one brain has something in it and infuses that into another brain. The heuristic approach very frankly and honestly recognizes that everybody has to be his own teacher, just as we know that all hypnosis is self-hypnosis. It may occur more or less readily as a result of a transaction, but fundamentally the so-called receiving agent is the creating agent. The learner is his own teacher, and the heuristic mechanisms that Elton discusses in his paper are designed to promote that kind of approach.

Elton uses the term heuristics; these are simply techniques by which you may try to achieve learning

through a questioning or discovery procedure.

Let me now go to what I conceive to be another important point that I would like to make about this paper.

Well, the hell with that! Let me just say this . . . [Laughter . . . Applause] In spite of the appalling brilliance of this paper . . . [Laughter] . . . which I'm really, I think, in a better position to appreciate than you all because I've been looking at it for the last few weeks . . . it seems to me the fundamental and very important message that Elton Carter has brought to us with his paper is that general semanticists ought to get off their duffs and start using a heuristic approach in the training process, and stop merely babbling at each other in prescribed ways, not eliminating, however, I trust, I hope, the lecture approach, because some people at some stages in their lives do know a little bit more than others about some things and lecturing is an efficient way to communicate that. But the shift ought to be, particularly for those of us who are teaching in institutions outside of New York City and Connecticut, a shift of orientation away from the lay-it-on-em point of view to greater commitment to a life-giving heuristic methodology.

On one final thing I think I have to call Elton to task. Throughout the paper he has presented a brilliant set of propositional functions. We don't have time now -- thank God! -- to go into . . . [Chuckling] . . . what constitutes a propositional function as distinguished from a proposition. But what I would like to end with is a two-part challenge to Elton. Between now and 1979, (1) do not resign as the Director of this playlet that you are getting underway here today and (2) plan, between now and 1979, to come up with more propositions rather than just propositional functions. Any man who can write a paper like this has an obligation in time-binding to hang around and help us make propositions.

That's the challenge.

KORZYBSKI MEMORIAL 1973

J. Samuel Bois

I should like to add a fourth panelist to the three that are already engaged in discussing the development of the korzybskian system in the course of the last forty years, Elton Carter, Walter Probert and myself. This fourth member of the panel was busy with a similar topic forty years ago, and I think it would be helpful to us to hear his thoughts about what should happen to his/our system and--soaring to a higher level of abstraction as he often did--to all epistemological systems. It is Korzybski himself that I invite to sit with us and transact with us across the forty calendar years that appear to separate us. His contributions we can find in the pages of Science and Sanity. First he warns us of a danger to avoid:

One of the dangers into which the reader is liable to fall is to ascribe too much generality to the work, to forget the limitations and, perhaps, one-sidedness which underlie it (p. 143).

After this warning, he comes with a directive:

We should not discuss how 'true' or 'false' the A(ristotelian) system appears, but we should simply say that, at a different epoch, other postulates seem structurally closer to our experience and appear more expedient. Such an attitude would not retard so greatly the appearance of new systems which will supersede the present non-A(ristotelian) system (p. 405).

It sounds as if he were anticipating, forty years ago, to be invited to join the present panel. Yes, Alfred, we are now at that 'different epoch' you were speaking of, and we take good note of your suggestion to look for other postulates than the ones which you felt were expedient in your day and age. I understand that these new postulates had better be somewhat in line with those you gave us and which proved to be so helpful to us for so many years. But they will emerge free from yours; their structural arrangement will be different, as for instance, calculus differs from algebra, trigonometry from geometry, and particle physics from classical physics. Continuing to address our senior panelist, I report to him that we took in great earnest another suggestion of his:

The present system is an interconnected whole: the beginning implies the end, and the end implies the beginning. Because of this characteristic, the book should be read at least twice and preferably oftener. I wish positively to discourage any reader who intends to give it merely a superficial reading (p. 33).

Twenty years ago, I narrated in the General Semantics Bulletin (Nos. 12 & 13) my experience of living for fourteen years with Science and Sanity.

I read the book, or rather I wrestled with it for months. I enjoyed the tussle: it was an exercise that tested my strength

and kept me in better trim for my daily work. Soon I noticed that I was learning new holds from my antagonist. Now my copy of Science and Sanity is beginning to wear out from repeated thumbing. It is not (physically) what it was fourteen years ago, and I am not ('mentally') what I was in 1939.

And I described my reaction to the book in the following terms:

Science and Sanity is not the linear treatise that goes step by step in a straight direction. It is a multi-dimensional manifold where variables intersect, bend up and down, forward and backward, and go through unexpected curvatures and torsions in a space-time continuum. It has a closely knit structure, but not the steel-girder type I expected. It is alive, growing, moving like an organism with vital energy throbbing in every cell, casting off tissues that have dried up, renewing itself by assimilating the products of science in the space-time network of events, wherever man has transformed the phenomenal world into human experience. In S & S I could not find the well-defined divisions of the classical man-made building; the elevator did not run up and down a straight shaft, the rooms were not numbered in rows. Chapters overlapped with chapters, paragraphs crisscrossed in ever-changing patterns, sentences were pregnant with meanings that expanded and contracted when I touched them. I felt I was caught within a strange world where up and down, right and left, forward and backward had lost their directional value. Euclidian space was gone, gravitation was gone, things were happening that the light of formal logic was too coarse to reveal. (p. 3)

Anyone who has lived in S & S for a while knows how it is easy to get lost in that luxuriant growth of ideas, speculations, considerations, and potential revisions of human activities in personal life, education, economics, and politics. It takes some time for one to sort out the tremendous riches that interthread in a tight bundle. Korzybski himself does not always agree with himself when he speaks of the main feature of his work and system. In Manhood of Humanity (2d. ed., p. 11) he refers to consciousness of abstracting as the main aim of his work. In S & S (p. 19), he states: 'The term semantic reaction is fundamental for the present work and non-elementalistic systems.' Of these two statements I took the second as the nucleus of the growing cell I wanted to develop into a full-fledged organism. I made semantic reaction--which has lately been replaced by semantic transaction--as the key notion, and I proposed as a new description of man, not his time-binding characteristic, but his multi-dimensional totality of thinking, feeling, self-moving, and electro-chemical activities in a continuous transaction with a space-time environment.

This was really nothing new; it was culled, almost in its entirety, from page 23 of S & S where he speaks of the many aspects of any psychological occurrence, and it was translated into a diagram because I believed in what he said on page 452 of S & S: 'Visualization represents one of the most beneficial and efficient forms of human "thought".' It has been my hope that this diagram

may become, in the sciences of man, something that corresponds to what Bohr's model of the atom represents for the common man when he thinks of the atomic world. The publishers of my main textbook, The Art of Awareness, stamped it on the front cover of the first edition; for the second they chose a more compact design invented years ago by a student at Viewpoints Institute, Lee Bernstein. Eventually I used it in a revision of the Structural Differential, inserting it between the parabola, the circle, and the labels, to indicate that abstracting is filtered at every step through the sieve of our whole space-time make-up. By doing so, we take care of at least one aspect of circularity.

The Structural Differential was also modified in other ways. Instead of the rather static terms 'event', 'object', and 'labels', which describe its main parts in S & S, I suggested statements, in which a verb is the key term, and we had 'What is going on'--later summarized in the acronym WIGO--for the parabola; 'What I am busy with' for the circle; and 'What I say about...' for the various labels. Finally I replaced the holes in the original parabola by smaller parabolas to indicate the indefinite multi-dimensionality of every point event, and corresponding unit of discourse, which we accept as quanta of the world we live in. At the 'What I say' or label level, the holes remain as more sharply defined vacuities.

At the time I published Explorations in Awareness (1957), no derivative book had discussed multiordinality beyond what had been said in S & S. As a matter of fact, Wendell Johnson, who gives more pages to it than anyone else, fills one of the three with a long quotation from S & S, saying as an explanation for so doing: 'It will be well to consult Korzybski's original discussion.' (p. 156) Hayakawa does not say a word about it. I devote three chapters of Explorations to it (21 pages), ending with its applications to business situations and using it as a bridge to two notions that are definitely mine, the structural more and semantic jumps. Multiordinality was preceded by a five-fold classification of types of abstraction, which I eventually called evaluative, classifying, objective, self-reflexive, and relational (The Art, pp. 85-90).

On page 194 of S & S Korzybski distinguishes three periods of human development: the pre-human or primitive period of unrestricted identification, the infantile or aristotelian period of partial identification, and the adult, non-aristotelian and 'scientific' period based on the complete elimination of identification. From this and from Bachelard's epistemological profile, which assumes that each individual, in his personal development, recapitulates the cultural history of humankind, I devised a five-step scale of human development, with conceptual revolutions, as seen by Percy W. Bridgman, highlighted as transitional phases of turbulence and creativity between relatively quiet periods of crawling advance. This broad historical frame of reference has been widely accepted by a variety of publics, from business men to scholars dealing with philosophical and cultural issues. It eventually became, after a full year of speculative research with the advanced group of students at Viewpoints Institute, the theme of a book published by Harper & Row in 1970 with the title Breeds of Men. This, in turn, became the source and origin of the new science-art of Epistemics, which has become my main concern for the last three years. In his treatment of the neurological aspects of our

semantic reactions, Korzybski uses what he himself calls 'a rough and oversimplified hypothetical diagram' (S & S, p. 193) where he speaks of the nerve impulse as passing through the thalamus to the cortex and returning on the same pathway. Elsewhere, in his chapter IX (S & S, pp. 111-122), he discusses what he calls colloidal behavior, summing up his views in this area in the following terms:

It is known the colloidal behaviour is exhibited by materials of very fine subdivision, the 'world of neglected dimensions', which involves surface activities and electrical characters of manifold and complex structure, and therefore the flexibility of gross macroscopic characteristics. It is well known that all life processes, 'feelings', 'emotions', 'thought', semantic reactions, and so forth, involve at least electrical currents. As electrical currents and other forms of energy are able to affect the colloidal structure on which our physical characteristics depend, obviously 'feelings', 'emotions', 'thought', etc., in general, s.r., which are connected with manifestations of energy, will also have some effect on our bodies, and vice versa. Colloidal structure supplies us with an extremely flexible mechanism with endless possibilities. (p. 121)

We must remember that this passage on colloidal behavior and the description of the thalamic region were written forty years ago, when there was no electronic microscope to look into the nucleus of the cell, no knowledge of the reticular formation as revealed by the work of Jaspers and Penfield, no molecular chemistry and no DNA or RNA helical chains as designed by Watson and Crick, no adaptation syndrome and no stress as studied by Hans Selye, no cybernetics, when the Hixon Symposium on Cerebral Mechanisms was still twenty years away in the future and the Detroit Symposium on the reticular formation of the brain still farther ahead in time. Other major events, now known by the man in the street, such as the atomic bomb, the radar and the laser, the space satellites, the sky lab, and the landing on the moon were not even dreams, except for some more daring science fiction writers. This is where I admire Korzybski's almost prophetic perceptiveness and his guarded power of speculation, as he stood on the growing edge of the sciences of his days. But this is also where I become keenly aware that what we are and know today has been given to us by the time-binding activities of a whole generation of workers who thronged the field between the thirties, when he wrote Science and Sanity, and the seventies, where we are now. Some of these thinkers are still among us, and I think it is important for us to pay special attention to those who are working, not only with particular discoveries and inventions, but also in the field of methodologies and overarching postulates. I borrowed definite schemes of thinking from some of them, particularly from Kenneth Boulding, Abraham Maslow, Teilhard de Chardin, and Sylvan Tomkins; others, such as Norwood Russell Hanson, Michael Polanyi, Robert Oppenheimer, George Polya, Thomas Kuhn, Julian Huxley, Adelbert Ames, Jr., George Kelly, Suzanne Langer, Kurt Lewin, Alfred North Whitehead, Percy W. Bridgman, Benjamin Whorf, Erwin Schroedinger, Werner Heisenberg and Leon Brillouin can be seen by any well-informed reader as they stand in the background of my speculations and provide me with a general orientation that has much in common with the push Korzybski gave me on my way to a fuller awareness of the less obvious trends of our cultural evolution. Of those whose work

I found particularly helpful, Kenneth Boulding deserves much credit for his levels of organization, as described in Chapters 2 and 3 of his book The Image, which I used for my own description of Mental Models (The Art of Awareness, pp. 137-155). It makes it possible to detect the baleful implications of the mechanical thinking models we are using most of the time in human affairs, and alternatively to begin to profit from the biological models that introduce the notions of growth, development, and maturation in our thinking about ourselves and about the institutions we have created.

From Maslow I borrowed his postulated scale of instinctoid needs, from basic physiological drives to self-actualization. At the level of muscular and postural habits, I inserted the differential relaxation of Edmund Jacobson and the primary control of F. Matthias Alexander. For an overall incipient theory of affects I turned to Sylvan Tomkins, whose work unfortunately stopped short in the middle of my presentation. Finally, I swung wide open the doors of the world of values in a chapter entitled, in the korzybskian manner of putting a 'non' before whatever we discard, 'The non-intellectual aspects of semantic reactions.' When I speak of non-intellectual aspects of human behavior, I do not mean to belittle the intellect and the part it plays in changing personal values. But I mean to say that, at first sight, Korzybski

sounds so 'scientific', so 'technical', so 'intellectual' and dispossessed of human feelings as we expect them, that we wonder what he means by 'values'. At first we feel him cold and detached from life as we live it, life with its doubts, its sorrows, its loves and its hates, its enthusiasms and its depressions, its worries and its joys. At least I did find him cold at first. He was 'brains' to me, too much 'brains' and not enough 'heart'. (From 'General Semantics and Human Values', in General Semantics Bulletin Nos. 8 and 9, 1952, p. 89.)

Yet, I had to report in the same article, that the executives who took with us a full program of study and application of general semantics generally report that it makes them 'better' men, more willing

'to give and take,' etc. Some eventually discover 'that G.S. gives a scientific foundation to the Golden Rule,' some see in it a revised version of 'the Christian ideal of humility and charity.' But they fail to recognize in Science and Sanity, or in most other books they read, an explicit rationale of what they experience.' (G S B, 8 & 9, same page)

The chapter in The Art of Awareness on the non-intellectual aspects of semantic reactions is intended to give that rationale. It does so by discussing, not only the views of Alexander, Jacobson and Tomkins we just mentioned, but by introducing the topic of love as a transforming agent. It quotes Sir Charles Sherrington, the British neurologist, Pitirim Sorokin, the Harvard sociologist, Louis Pauwels, editor of the French magazine Planete, Hermann Keyserling, the German philosopher, Teilhard de Chardin, the paleontologist-philosopher, Gardner Murphy in his chapter entitled 'The Skeptical Psychologist' in his book Personality (Harper, 1947). It deals with the avoidance of conflict-fostering practices, which we accept as normal constituents of common-sense behavior, and

gives a picture of the new man in the making Korzybski told his faithful disciple Irving Lee he was bent on creating.

In the last chapter of the textbook came the applications. I confess that I did not emphasize the devices of indexing, chain-indexing, dating, etc., the quotes and the hyphen mentioned in the introduction of the second edition of Science and Sanity, although I used them explicitly and implicitly all through my books and my articles. To them I added a new mental model that serves as a frame of reference for self-observation and self-management. It is the Self-1, Self-2, Self-3... Self-n multiordinal diagram, which includes the notions of feedback and self-renewal, taking cognizance of the indicators of safety and danger in what we say and do, and in the manner we say it and do it. To this were added definite directives on how to listen, how to read, how to communicate. In 1968, these last directives became the subject of a minibook published by Viewpoints Institute, under the title of Communication as Creative Experience, a treatise for second-generation General Semantics.

This small book, physically not bigger than a pamphlet, marked a turning point in our view of the korzybskian discipline at Viewpoints Institute, in Los Angeles. Taking our cue from first, second and third generation computers, the first with electronic tubes and of the size of a house, the second with transistors and of the size of a room, and the third with modules and reduced to a pellet one can hold in his hand, we made the attempt to condense all the notions of General Semantics into a simple overall scale that could serve as a matrix in which we could insert them as a set of interrelated principles and directives.

This brought us to the stages of human development, as described at length in a book, Breeds of Men, published by Harper & Row in 1970, and in the launching of a new discipline, announced in ETC, the thirty-odd year old quarterly of the International Society for General Semantics, in its issue of June 1971, as a manifesto on Epistemics, A Time-binding Emergent from General Semantics.

In an article already written for a new quarterly publication that Viewpoints Institute is bringing out this Fall, I wrote:

I have passed from General Semantics to Epistemics to make it clear that I take into account a theory that Korzybski barely mentions in his Science and Sanity. That theory is evolution.

The word 'evolution' comes twice in his big book, and once he speaks of it in very strong terms: 'Without some theory of evolution,' he writes, 'most of the natural sciences, medicine included, would be impossible.' (p. 271). For a sweeping statement, this is surely one. If the sciences we are now developing are impossible without the theory of evolution, what of their future development, our understanding of their implications, and the application of their findings? Are they possible without an explicit and frequent reference to the same central theory? Personally I don't think so, and I chose to make my view explicit by adding to general semantics a characteristic that makes it an entirely different discipline. If you remember the structural

more, you will grasp the importance of what I am saying. Epistemics is structurally more than General Semantics. It is not General Semantics plus a few special notions added to it; it is a new discipline, with its own postulates, theorems, and applications.

.....
 Once you have this notion well established in the center of your thinking-feeling self, the image you carry within you of yourself, of your fellow humans, and of the whole world, is transformed to something you had never imagined before. You do not only see, as your friends of the hard sciences (physics and chemistry) that the 'stuff' of the universe is nothing but ceaseless activity, but you become conscious of the fact that this 'stuff' of the universe, including yourself and all things, living and non-living, is pure constant activity working itself in a definite direction.

There are other characteristics that differentiate General Semantics and Epistemics. The former is locked within our Western culture, asserting that it is non-aristotelian but remaining within the Indo-European family of languages, as the Protestants of the sixteenth century were non-Romanist and made themselves free from the prevailing religious culture, while remaining to this day within the tradition of Christianity. An epistemist realizes that our episteme, aristotelian or non-aristotelian, is only one among many. Humankind can be seen as a family of cultures, none of which has the adequate picture of man and of his place in the universe. The search for objective truth has divided humankind long enough. We have to join in a common attempt to create a so far non-existent set of formulations and values that is in keeping with the vast movement of centration that packs all nations and institutions together on a small planet floating alone in the chilling cold of a space filled with waves of energy we are just beginning to perceive. We have to abandon for good our drive for so-called scientific objectivity; we must devise a semantic unity of humankind comparable to the common genic pool to which we all belong.

I fully know it may sound like a wild dream, and I am not in the least disturbed if some people think that monomania is taking hold of the weakening brain of an old man. Somebody has to take the risk of talking that way, if we are to come out of the sorry plight we are in, and I don't see why it could not be an octogenarian soon to walk off the stage, and already free from any allegiance to any school of thought or any institution that has to save face. I take comfort when I read the following short poem of Walt Whitman which he entitled 'The Base of All Metaphysics.'

And now, gentlemen,
 A word I give to remain in your memories and minds,
 As base and finale too for all metaphysics.

(So to the students the old professor
 At the close of his crowded course.)

Having studied the new and antique, the
 Greek and Germanic systems,
 Kant having studied and stated, Fichte and
 Schelling and Hegel,

COMMENTS

RACHAEL LAUER

I will make my comments brief because I'm sure we're all hungry. I am scared to death of being up here because it's very difficult commenting on this level of organized thinking. At the same time I'm really delighted and honored to be in such a position, and I appreciate Charlotte Read's asking me to make some comments.

I must say that J. Sam Bois' paper handed to me is not the same J. Sam Bois that was here this morning. Nevertheless, I would like to make a few comments as to what I got out of reading his paper. He's been talking this morning about a new sort of man as a product of this kind of training that we're getting from Korzybski and his antecedents and Bois' evolution, and may I say that it struck me in reading -- may I call you Sam? -- Sam's paper and hearing him today, that he himself is an example of a new sort of man.

One of the things that struck me about the way he wrote his paper, the medium, is the way he built in his references to other people who have influenced his thinking. He mentioned a great many names in the paper and also this morning. There's significant difference from the way the average scholars tend to make references. They make hundreds of little references in footnotes -- they make one every time they find someone in the literature who had something to say similar to what they are saying.

What he has done instead is to use his references as an evolutionary process and put himself in relation -- not in competition, but in relation -- to many of these other thinkers. This capacity to trace the roots of his own work to others' thinking, to credit them, is not like the curtsies that we scholars make. What I see him doing is actually applying his evolutionary epistemics to his way of describing the evolution of his epistemics and his own development therein.

Just as a small point, I wonder if we couldn't start here today a revolution in how to write papers. Since there is so much literature today, and one of the things that stops us from writing papers is that we have to quote everybody under the sun, let's say that from now on we should require of our students that they see their own work in the perspective of the evolution of others' thinking and where they fit

in, rather than simply quote, quote, quote, quote. That's just a small idea.

I would like to make a couple of comments on where I'm at in the use of Sam Bois' epistemics. I would tend to agree with him that his epistemics is not just an addition to general semantics, if my own experience with it is any criterion. My excitement was equalled only by my excitement at the discovery of Korzybski some twelve, fifteen years ago. It was excitement anew, an 'Oh wow!' experience with epistemics. At the same time, I've discovered in the pedagogy of general semantics and epistemics that I cannot teach one without the other. As much as one is a mutant from the other, I have yet to find a way of teaching an epistemological profile to students who have little or no background in Korzybski and general semantics. Which brings me to another point.

One of my understandings of epistemics is that it's an applied science. Sam has applied his art of innovating to all kinds of concepts -- transportation, communication and leadership, and to the science of knowing itself.

My interests are pedagogy; I'm a psychologist. I train other psychologists. I train them and they in turn work with the school teachers and with children, etc. I am very much interested in what epistemics has to teach us about the teaching of epistemics.

I brought Sam to Arden House in Harriman, New York to talk to the leaders from the New York State Psychological Association in the hopes that his broad viewpoint would have an impact on the thinking of our scientifically-minded brethren. A great majority of us psychologists are still analyzing, collecting data, contributing data, mechanically applying solutions, getting teachers to apply solutions -- it's this, it's that and the other thing. I felt that if I could just let them hear him and learn about his books -- brief them in -- up there, that maybe it could have an impact. I think it had more impact on me; they had not had adequate background in general semantics. There's still a tremendous need to teach it, and to teach it slowly and carefully.

There's still a tremendous need for us to have a Viewpoints here in New York City so that we can be learning and immersing ourselves and evolving our

own evolution. There are things that I learned just this morning sitting here, because I realized what I haven't learned when I recognized how impatient I am, when I want everybody to change, hurry up and change, just stop being the way you are . . . hurry up . . . I've got to think of ways of teaching you all, getting your heads from here to there . . . realizing that that's a mechanical model again. I can't, you can't, we can't get people to move.

So I would point up only that I'm deeply appreciative of your continuation of general semantics, Sam, but of course, you've raised as many questions as to what I'm going to do with it as you have in answering my questions.

Thank you.

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MERRITT WILLIAMSON: Ladies and gentlemen, I think it's about time that we got our afternoon session underway. After such a delightful luncheon it's going to be difficult, I think, to concentrate on matters at hand. . . . I would like now to introduce the third speaker of the panel, and this is Professor Walter Probert. On the program his topic is listed as 'Exploring the Dynamics of Verbal Communication, from Viewpoints of Korzybski, Wittgenstein, Austin and McLuhan'.

LAW TALK AND WORDS CONSCIOUSNESS

Walter Probert

One is tempted on an occasion like this to be profound. Certainly the previous speakers were, although not exclusively so. Let me right away say one thing that might at least sound profound. That is that law discourse--law talk as I prefer to call it--is normatively ambiguous and among the most manipulable of all forms of discourse. What I will have to say about law talk stems from that base, but I will put it in terms of law talk and words consciousness.

In this year of the drama of Watergate exposure, talk of law is timely indeed. We have been publicly much involved with law in these last several years, before that in that period some may have almost forgotten. Certainly this University is a fitting place to recall those times, the times of campus upheavals and the general social upheaval which were marked by a variety of more dramatic forms of protest than is currently apparent. Remember the cries of law and order during those days, under the cover, at least, of legalistic rhetoric--which ironically has been turned back against those who were manipulating it at that time.

Over the last decade we have seen an increasing national involvement with law. It is much in the news and worth talking about for that reason. I think there is need for wide public discussion of law and its processes, including if not especially its linguistic dimensions. It is all rather complicated. There is need to promote understanding.

Law aside, words consciousness, generally speaking, is certainly appropriate to this particular occasion, to any occasion when one speaks of Korzybski. My own experience with Korzybski is in this area of concern with words consciousness or sensitivity to the communicative dynamics of words, if you will. That to me is the major impact of the Korzybskian approach. Not that he is alone in the field, not with the likes of Wittgenstein and J. L. Austin from philosophy, among a steadily increasing variety of approaches.

What am I talking about when I speak of words consciousness? I suppose anybody who is really a 'g.s.-er' knows without further comment, but let me comment a bit more about it. And let me add that it is particularly appropriate to talk about words consciousness in these days because we have over these last few years seen an increasing experimentation in what has been called states of consciousness, different mental states, some would say, involving changes in one's contacts with one's self and the world. Some of it comes through drugs, but not all of it. There were ways in which McLuhan explored in this area in his emphasis of other aspects of communication than words. As a teacher I am particularly conscious that the era has been increasingly anti-intellectual, perhaps anti-words. Consciousness without words. The thought is that somehow words impede consciousness or sensitivity to non-words, inhibit total involvements. That is often true, as indeed Korzybski, too, stressed. But it is not always or necessarily true.

Through word sensitizing one can reach higher levels of consciousness and awareness. I think this is where Korzybski headed us. As you know, many people are not aware of this dimension of Korzybski, not at all, maybe because of that label 'general semantics.' Few here would suffer from the semantic blockage of the expression, yet many people think that general semantics is only involved with language, only involved with words. Of course it isn't. For that matter, I am not sure how you would be involved only with words. But one has to understand language and words as fully as possible in order to understand one's self and one's involvements with what is going on around him and what is going on inside. That is a strange notion to the uninitiated.

When I talk about words consciousness, I am really not just talking about a hangup on words, if that is even possible. I mean, what are we talking about when we are talking about words? Part of being words conscious is to realize what sort of concept 'words' is. How do you identify a word? Now I realize the risks of word-magic here, of elementalism and such, but just as we say that meaning is not (just) in words, similarly you are never really just confronting words if you are communicating or thinking or reading because then you are involved in some sort of interacting or relating. There is interaction even if one is only reading, with the stimulus on the page but also within one's self. This is part of the process that is often forgotten, say when we are doing what we call interpreting the Constitution.

There are levels of words consciousness. Even those who have not come into contact with general semantics or other sensitizing approaches to words have some words consciousness, and some persons are highly sensitized. Consider familiar examples. Words consciousness is involved in asking what a word means in a conversation or in print, for instance, or looking it up in the dictionary. (Even g.s.-ers look up words in dictionaries, not to find the meaning or to be controlled by the findings, but to become familiarized to uses of the word.) Or when one recognizes an ambiguity, that is some kind of level of consciousness of words. There are some very subtle ambiguities that are involved in verbal communication, and few really plumb the depths.

In my book, 'Law, Language and Communication,' I make quite a bit of puns and metaphors, as a way of sensitizing to words. Whether a pun pleases or annoys, recognizing it involves words consciousness, as does the conscious use of a metaphor. (Unconsciously used metaphors pervade what we call language.) So you see this notion of words consciousness is hardly esoteric. But there are stages of advancement which are not generally appreciated or easily reached. If one takes this far enough we are probably relating to Sam Bois' formulation of epistemological profile, for instance. As one goes further and further into words consciousness, he is getting to some different states of involvements.

Those who have read in popularized semantics, as distinguished from general semantics, are familiar with the idea of loaded words. That distinction between descriptive words and feeling or judgmental words begins a path of exploration of the many ways more than two that words actually get used. It oversimplifies, but it is an important beginning for words consciousness.

When you come to the Korzybskian sort of explorations and restructuring you have a rather high level attempt to bring words consciousness to students and others, with his various devices, for instance, the indexing, the quotes, and the 'etc.,' and all of that, all part of the business of promoting a consciousness of words. He went much further than investing devices, and much further than most linguistic analysts would go, to say that the use of any expression, any word, or any reaction (semantic reaction, he said) involves some sort or order of evaluation. The oversimplified dichotomy of popularized semantics into description-feeling does not go that far. Further, Korzybskian structuring in terms of multiordinality, the general concern with language structure and events structure, and so on is way, way along in this business of words consciousness raising.

Structure. Chomsky and his heirs among linguists have shown considerable interest in the structure of language. As far as I know, few of them know anything of Korzybski's writings or give heed or credit, but then their theories are not all that closely related to his. They take off from primitive grammatical analysis, attempting to go to the roots of language to discover laws of language, deep structure. It is an interesting and no doubt legitimate approach, but too much cut off from non-verbal event processes.

Thinking structure does seem a key way to the understanding of vital linguistic relationships, for instance the relationships of the ways words are used to the ways things are ordered, or are subject to being ordered in the world or in one's behavior. Form and structure affect us in subtle ways, as McLuhan suggested about media of communication. One of the most subtle examples of all may be a word itself. I suggested earlier the difficulty of identifying just what a word 'is.' (Well, of course it is not anything.) If you are pointing to something printed on a page or the sounds of conversation, here's a word, there's a word, these 'things' might more legitimately be called word-forms, rather than just words. People have difficulty with that, and it is difficult, but key to deep words consciousness.

If you see the word 'W-O-R-D' on a page, that is a form you are confronting. The significance of that word or any word--its meaning, impact, stimulation, value, potential--depends upon how that (word) form is related, structured, to other forms, including the grammar-form of the sentence, and, more difficult to discern, the grammar of the paragraph and of the situation, and all of that as related to the form of the communication, including the medium, as McLuhan would have it, whether written, oral, or electronic or whatever. The message may catch attention while the overall structure captures the 'mind' or nervous system.

It seems to me that some of those who approach the world through language--including Wittgenstein, J. L. Austin, and Korzybski--are attempting to discover the subtleties of the linguistic structure, to break it open to discern its impacts on individual thinking, feeling, and behavior. We do not nor should we restrict ourselves to structure of language, however. We can talk of distinctive forms of discourse, entire areas of discourse, as we do of poetry and as I want to of law talk. This, too, is part of my theme of words consciousness. If a lawyer is talking to another lawyer or to a judge, there are

constraints and restraints that come into what is said through the established form of discourse that he has chosen to use. He may not have a choice, however. We are all restricted in how we may talk if we will communicate, which is the chief justification of speaking of language. A lawyer must talk under certain further restraints, when he talks in court, for instance, at least when he talks to the judge. He must mainly talk law, or better, engage in law talk.

Well, I am just trying briefly to catalog some of the facets of words consciousness, not trying to prove any of it, or even to demonstrate it. I am assuming that it is all pretty much known to you, or at least more readily accessible to you than the uninitiated.

Closely related to words consciousness, perhaps in a chicken-egg way, is an associated cultural sensitivity. Yesterday's New York TIMES, on the page opposite the editorial page, contained a most interesting and relevant essay. The author is a woman who writes about sexist language, a species of the genre which says that our language habits are confining of women, and that one way to aid in liberation of women is to raise all persons to consciousness of the ways that language (habits) structures women into a dominant-submissive type of cultural role-relationship.

Of course the rules of word use are sociolinguistic in many more ways than the anti-sexists discern. Anyone with a liberating goal would do well to pay heed to sociolinguistics. The particular essay adds a new dimension to the now fairly familiar analysis of sexist language which would, just for instance, substitute 'chairperson' for 'chairman.' It points out how the formerly taboo sexual words are anti-female, being sadistic and reflective of male domination in their origins and implications. To bring such matters to consciousness tends to deprive the word-usages of their potency.

There are many ways in which one may raise his consciousness of cultural discriminations, may become culturally sensitized, as for instance to racist language. But it goes much deeper than these explorations suggest. Potentially every word has that sort of cultural significance. Thus, consider as I stand here delivering these words. I have no chair to sit on, but I can sit on the table where the lectern rests. Suppose I sit on a table in your dining room. You might censure me quite quickly and easily simply by saying, 'That's a table.' 'Table' is not just a descriptor in that assertion, carrying implicitly the purpose of the object, the cultural function. The statement carries with it an implicit order how one should (must?) relate to the object.

Oh, it goes so far. It can be a very serious business, but fun too. Consider names or the ways one person addresses another, proper nouns and pronouns. The 'simplest' part of speech is the proper noun, we once were told. Thus, the word 'person' refers to all alike but a name refers to one person. Well, not necessarily. That is, names are not necessarily so simple, so unifunctional, as the sociolinguists have discovered. There are rules for first naming and last naming. How is he addressed or referred to, even by those who are contemptuous: Nixon, Mr. Nixon, President Nixon, Dick, King Richard? The tone of voice or the eyebrow can do it, but so can the violation

of accepted usage. Analysis of people-naming is an aid to words consciousness, an example of it.

Well, there is a lot more to it, but this is the area of my concern. Now try to relate words consciousness to law. Move to law talk.

That very move calls for words consciousness, involves it. We speak of law--the law. We seem to be speaking of some-thing out there. Objectification. There is a general tendency to objectify law and rules. One way to avoid such entrapments is to convert from law to law talk. If you hear the word 'law' or an analysis of law--and there is a lot of that these days--think in these terms: That's law talk taking place. Then you may more readily keep your eye on what else is going on, what the law talker is doing.

Many of the lessons that apply to everyday talk apply to law talk, of course, although there are some distinctive aspects of law talk necessarily distinguishing it from other kinds of talk. It is interesting that most of those who have given us sophisticated analyses of the uses of language have shied away or stayed entirely away from analysis of law, as did Korzybski. As valuable as is his map-territory metaphor, as much as it helps even with understanding law talk, it is not enough. For one thing it is empirically biased. Naturally enough, for it comes out of an approach to philosophy which was concerned about the linguistic dimensions of empiricism, including the goal of making language work better for that purpose. We see that in the title 'Science and Sanity.' Not only incidentally, if we relate the methodology of general semantics to social science, g.s. makes for the skill of participant-observation in each individual. Still, general semantics is word-thing oriented. Law involves more than facts, even taking account of the multi-ordinality of both words, 'law' and 'facts.'

Law talk involves norms as well as facts. Yet the form of law talk is so often in the form of fact talk. Popularized semantics points out that feeling talk often comes under the camouflage of fact talk. So does law talk. Take this piece of law talk: 'I own this watch.' That sounds like a fact, i.e., it is in the form of fact talk. But there are differences in the implications of that piece of law talk. If I speak of ownership of a watch or any thing, I speak ultimately of my relationship to that thing, my legal, not necessarily physical, and perhaps my moral power to keep others from using or possessing it, ultimately of the protection I might think I have or can get to support that power. I am speaking against a background of rights and obligations, or that kind of assumption or expectation. Rights talk implies relationships which cannot be adequately captured in fact talk alone. Thus, for instance, proof of ownership is different from proof that the watch exists.

If we say of a person that he is a murderer, that sounds like a fact statement. Or compare one of numerous statements coming out of the complexity of Watergate. After the 'Saturday night massacre' it was often repeated and pretty well accepted by the mass media that Archibald Cox was an employee and that therefor the President had the right to fire him. Is that a fact? So typical of law talk, whoever says it. So typical of the dogma of law talk and not just the law talk of lawyers. It is cultural, deep in the expectations

of the public, that way of talking, based on the widespread assumption that somehow law is really that certain. If it is not, it damn well ought to be! Lawyers who might argue otherwise with that seeming fact of law would seem to be quibbling at their worst.

Most lawyers know law is not so certain as it is usually asserted to be, but their major role in many situations is advocacy, not description, to persuade, to move people to make certain decisions. Usually a lawyer does not go up to a judge and say, 'Your Honor, I think the law ought to be thus and so.' He says it is thus and so.

In any event, whether or not Cox was an employee in the legal sense, in the Constitutional sense, ought not to be regarded as a fact question, even if it does take that fact form. That is very hard, really, to appreciate. After all, what was he if he wasn't an employee? ('You're playing with words,' says the anti-semantic.)

Well, I want to know who picked that as the issue which decides the basic, important questions over it all.

That is part of the magic, the power to name the question. Translate the question to an ought. Ask whether we ought to look at Cox as an employee or we ought not; whether we ought even to be concerned with that question. Maybe we want to ask what kind of an employee, or what his relationship was to the highest points of power. That term 'employee' takes on numerous different shadings in legal dialectics.

Such is the case with the terms and doctrines of law generally, partly because they are necessarily at a high level of generality. If the rules and concepts are not at a high level of generality, then there is something wrong. Law talk cannot be ad hoc or specific because then it is discriminatory, to pick out an individual to be treated in a particular way different from others. So it has to rise up to a level of generality which necessarily makes it ambiguous--and manipulable.

Law discourse, being so highly manipulable, is maximally available for projection of one's personal values or moral outlook into an assertion of what the law is. This is stuff for deep study. The appreciation does not come easily even for students of law or for lawyers. There are so many, many examples. Not every case is an example, but most of the controversies that are played in the mass media are of that kind, including various pieces of Watergate. When President Nixon refused to turn over certain tapes in the fall of 1973, it was said he was acting above the law. At first that was wishful thinking, later it was not, when he submitted to judicial authority without appealing to the Supreme Court of the United States. It started, if you will, as a political question and ultimated to a legal question. The matter was worked out right before our eyes. The question of how the President had to act with respect to those tapes simply had not been established in any way that candor could allow us to say the law was clear. Actually, as of this 'point in time' it is not clear except as to those specific tapes, unless we now wish to say that it has been established in the court of public opinion (no mean source of law), an important variable camouflaged by the popular as well as the professional dogma of law talk.

See the rhetoric of it, 'the law is this...the law is that.' There goes that 'is' again, the 'is' which so pervades in leading people to conclusions that other people want them to reach. There was not adequate precedent of a strictly legal or even judicial kind on which to base the dogma. The 'is' constitutes a prediction based on an 'ought' drawn from political dynamics. Legal norms, moral norms, political norms, ethical norms--normative ambiguity, as I said at the beginning--simmer in the stew from which the dogma of law talk so often comes.

In a Constitutional situation such as this, you see, it is really deceptive to say the law is this or that, if we thus imply that it is clearly stated or ascertainable from a reading of the Constitution or even from past interpretations of the Constitution. A different sort of reference may be justified, for instance as to where the norms of government ought to be fashioned. Then maybe a prediction is justified. If we say in the early autumn of 1973 that the President was acting against the law in not producing the tapes, then we are involved in some very complicated political process. Well, I want to suggest that is very much the way 'the law' often works. That may be an advantage. I am not trying to abolish legalistic rhetoric because it has its positive values as well as negative. Indeed there are some risks in having a public fully educated, fully conscious of the way the rhetoric works.

Do not misunderstand. I would opt for ultimate candor. Ultimately, ideally, there should be a full public consciousness of the workings of law talk. But if and when we reach that ideal, we shall have needed to come to some different ways of ordering human behavior--perhaps a cultural capacity to accept more readily that the process of reaching decisions is often more important than the norms which may ascertainably precede the process.

Well, in any event, my point in going into this sort of thing is to make the suggestion or perhaps the plea that this is an area--the legal arena--in which much more work is needed or possible, for those interested in relatively new inquiries qua words and language.

One other comment with respect to words consciousness generally. Kendig said earlier she senses or feels a growing favorable semantic climate. Yes, in the sense of a growing support for candor complemented by a gradual raising of the cultural levels of words consciousness. Yet I must make some pessimistic reservations, at least within my specialty with respect to lawyers. Many lawyers are resistant to the kinds of analyses that Korzybski promoted or, more generally speaking, to higher levels of sensitivity as to law talk--not all, but many.

The reasons are not hard to find. After all, the language of law, as many would prefer to say, is a mechanism of power. If you dynamite it, demystify it, and bring a full consciousness of the ways of that language, its workings, you are engaging in a re-allocation of power. The spreading of words consciousness is an immense liberating influence. I have no doubt about that, a humanizing influence. It is a democratizing process, and I think for that reason alone well worth pursuing.

COMMENTS

ALLEN WALKER READ

On the basis of Dr. Probert's recent book, Law, Language and Communication, I realized that I was almost certain to agree with what he was likely to say in his talk this afternoon.¹ Now that I have heard him, this is certainly true. He has shown the interplay between the principles of language study and the component elements of everyday behavior. His particular field is 'the law' (in quotes). The reciprocal feedback between high generalizations and the details out of which they are derived allows us to test our analyses.

At one place in his book, Dr. Probert asks the question, 'Can one imagine law without words?'² Apparently it is a rhetorical question, for he gives no answer. It was intended to shake us up. Nevertheless, I would very much like to know what his answer would be. Because he has a good imagination, he may be able to imagine 'law without words'. But since law does commonly make use of words, the next best thing is to explore carefully what those words do.

It has been a truism since classical times to remark on the importance of language in shaping human behavior; but the rise of a scientific linguistics in the last century at last has given a basis for understanding the mechanisms that are at work. The problems in vocabulary selection have been dealt with over the centuries, but only in recent decades has the realization come that grammatical categories, both obligatory and optional ones, control the direction that the message takes. Edward Sapir brought this awareness to many linguists from 1921 on,³ and it was strongly reinforced by Benjamin Lee Whorf.⁴ A few philosophers were able to break out of the older molds, such as Wittgenstein, Charles Morris, McLuhan, and the British group that have probed into 'ordinary language'. Dr. Probert has drawn upon

these to advantage. I find it difficult, however, to make a coherent whole of the outlook of these thinkers. What they present are striking insights and aphorisms and wise formulations, but they lack the full systematic breadth that Korzybski has shown.

Korzybski is so sound, it seems to me, because he is aware of the neurological basis of human reactions. He did not allow himself to talk about 'the mind', for that has habitually referred to an artificially split-off mentalistic realm. It will be noted that Chomsky, who is usually regressive to a 17th-century outlook, constantly talks about 'the mind'.⁵ The non-elementalistic approach of Korzybski will, I believe, be recognized in the long run as a necessary base.

The division of labor in the field of linguistics has resulted in special names like socio-linguistics, psycholinguistics, neuro-linguistics, geolinguistics, and others--until one begins to wonder about the boundaries of linguistics itself. A startling extension was made in 1972 when the president of the Linguistic Society of America, Dwight Bolinger of Harvard University, gave his presidential address with the title, 'Truth is a Linguistic Question.'⁶ He pointed out that questions of appropriateness in language are constantly dealt with in linguistics, and the most fundamental of all is the question of truth. Thus, lying is a covert category or 'mood' in the linguistic system, and linguists should take it into account.

This outlook poses some difficult questions, when we realize, as Dr. Probert has pointed out, that ambiguity is the natural state for any linguistic utterance. In our use of language we are constantly engaged in the process of 'disambiguation'. (Perhaps that is

a new word for your vocabulary, but it is one that has recently been much used among linguists.) We are bound to be lying by the nature of the linguistic system itself. Language is the chief obstacle to the recognition of the process nature of the event world. The languages we have inherited are a STATIC symbolizing of what is ongoing process and movement. Because of this rift, so difficult to bridge, we get many paradoxes. Out of this problem have developed the many attempts to transcend language, in the so-called 'non-verbal' training. This has been incorporated into the teaching of Korzybski's work.

The exploring of linguistic factors that Dr. Probert is doing results in

what has been called the 'de-mythologizing' of law. We thereby can get at the genuinely operative mechanisms that affect and indeed determine human actions. One of my early memories, going back to the 1920s, long before I became professionally concerned with semantics, deals with a legal term. In those years Frank Kellogg got a high reputation for his efforts to bring about the 'outlawry' of war, and for them he received the Nobel Peace prize in 1929. But what is 'outlawry'? It is based, I think, on word magic, for outlawry did us very little good. The problem that it dealt with is still with us, and men like Dr. Probert must do further wrestling with it. His emphasis on 'words consciousness' is leading us in the right direction.

¹Walter Probert, Law, Language and Communication (Springfield, Ill.: Charles C. Thomas, Publisher, 1972), xxix, 376 pp.

²Ibid., p. 59.

³Edward Sapir, Language: an Introduction to the Study of Speech (New York: Harcourt, Brace & Co., 1921), vii, 258 pp.

⁴Especially in papers printed in 1940-41, now available in Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf, ed. John B. Carroll (Cambridge, Mass.: Technology Press, 1956), xi, 278 pp., especially pp. 207-270.

⁵On Chomsky's reversion to 17th-century thought, see his Cartesian Linguistics: a Chapter in the History of Rationalist Thought (New York: Harper & Row, 1966), [xvi], 119 pp. He speaks (p. 32) of 'pursuing the fundamental distinction between body and mind'. Cf. also Chomsky's Language and Mind (New York: Harcourt, Brace & World, 1968), vii, 88 pp.

⁶Printed in Language (Journal of the Linguistic Society of America), Vol. 49 (Sept., 1973), 539-550. This paper is remarkably provocative, and I have not yet decided whether or not I can accept its main contention. My view has been that the role of linguistic analysis is to clarify the issues, and the concrete answers must be worked out in each field of science, such as sociology, anthropology, biology, ethology, etc.

⁷Note, for instance, the sensory awareness training that has been given at the seminars of the Institute of General Semantics, and the Panel on 'Non-Verbal Communication' at the 1963 International Conference on General Semantics, New York University, as reported in the General Semantics Bulletin, Nos. 30 & 31 (1963/1964), pp. 39-59, especially Charlotte Schuchardt Read, 'Communication as Contact,' pp. 39-40.