TRUE, GOOD AND GENERAL SYSTEM THEORIES:
How to DEVELOP AND EVALUATE Them

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Abstract

This review attempts to codify the bases in philosophy of science, physical and social, in order to aid future generic theory construction, development, evaluation, and potential research funding. To lay the groundwork, a theoretically core building block of a true theory is a **unit concept,** here proposed as "**change in relationships."** The overall procedure is built on the definition of true **theory** as a set of **deductively interrelated hypotheses**, which has important evidence to back it up (G. Homans, 1967). The six headings (I through VI) can each be represented by one main (and several lesser layers of descriptive charts).

I. A Generic **4-BOX FLOW DIAGRAM**, Chart #I, taken as a <_SORTING_> device, is a way of advancing from typologies and paradigms to a process diagram applicable to any brain-like mechanism in an interacting system. A variation makes the chart applicable as a general Social Problem Solver for applying any theory to concrete cases.

II. A relationship insight DEVICES typology arrays possible generic **MEDIA FOR UNDERSTANDING** (Chart #II) in an approach to a kind of cognitive <_SATURATION._>

III. **LEVELS OF TRUE THEORY**, stated in Chart #III (one Pre-theory + 3 Full levels), are a way of <_PRIORITIZING_>, culminating in a general application (whether oriented to policy or helping), one that contains practical prescriptions or guidelines for effective or fulfilling action (1988, 1989, 1993). A ladder of ten **meta-methodological concepts** in theory construction is reduced here (Chart #III) to the **THREE LEVELS OF TRUE GST.** The levels are labeled from bottom to top level as follows, # '0', **ahP (_ad hoc_ PRE-Theory),** then up through the three main levels: 1) **LPC (LIMITED PROBLEM (or Issue) CENTERED**, 2) **PAM (PURE ABSTRACT, MULTI-LEVEL),** and finally to 3) **CESP (COMPREHENSIVE ECO-SOPHICAL POLICY**).

IV. The four main **CRITERIA FOR A GOOD THEORY**, Chart #IV, with the goal of <_RATING_> (taken from Slawski's original 1974 article in _Zeitschrift fur Soziologie_, plus many prior _Proceedings_ papers), are: **1) Ease of application or testability, 2) information value, 3) predictability,** and **4) explanatory power** (the most crucial criterion of all). Every theory and every hypothesis should be measured up against these four criteria. Expanded lists up to **33 Criteria for a Good Theory** can be applied to any clearly describable situation, including organizational **Policy Theory**, or a **Helping Situation**.

V. This causal and typological list attempts to focus on a top level, short list of **13 Core Hypotheses**, containing GST's main distinctive hypotheses (Chart #V-i, then displayed side by side with their 13 corresponding prescriptions). This is a broad attempt at setting up a model for <_CODIFYING_> many extant, classical GST's.

VI. A case of a **TRUE, GOOD AND GENERAL SYSTEM THEORY** aims at <_ILLUSTRATING_> the possible utility of the overall approach presented here.

Specifically, **Gandhian Ethics of Conflict Resolution: A TRUE THEORY** (adapted mainly from A. Naess) is boiled down to 5 selected hypotheses and two norms (Chart #VI, based in turn on 4 normative Hindu concepts, *ahimsa, satyagraha, brahmacharya, swaraj and swadeshi*).

Keywords: GST, criteria for constructing and evaluating theories, true and good theory, insight devices, conflict resolution.

VERBAL OVERVIEW OF SIX CHART LAYERS (Toward a GST)

Without reference to the full text originally accompanying each of the (8 main) charts in this graphical (or poster) presentation, we can only give a bare bones overview. For curious readers (or browsers' passing by), it should be a good review of philosophy of science and research methods, both for the generally simpler because more controlled physical science, development and testing methods, but may be even more useful for those attempting to employ the very complex social, including management science approaches to verification and theoretical understanding. Hopefully, some browsers will be inspired to consult the references, mostly from prior ISSS/SGSR Proceedings (both textual volumes and, in more recent years, the CD-ROM's). In a way, the approach presented represents the author's autobiographical road through the maze, first from early historical description of various social and physical scientists' basic conceptual analyses, through more and more complex tools for doing research, then for integrating the often disparate-appearing theories, with their frequently mutually hostile defenders. The goal of the seeker was and remains an integrated, preferably holistic, understanding and explanation of the various problematic scientific, social and ecological issues that confront the contemporary world. The ultimate aim remains healthy, happy living through self realization plus socially and ecologically wise conduct.

I. The first top-level *SORTING* device, based on a very large number of typologies, ideal types, and paradigm triangulation, starting from a unit concept, namely "change in relationships," is Chart I, the generic **4-BOX FLOW DIAGRAM.** Adapted and modified from the basic three-box flow chart of action, results, and feedback, the author has added the fourth box, essential to a multi-level analysis, namely the contextual variables (which might include groups of similarly acting brain-like mechanisms, or social, organizations, community, societal, cultural or supra-national and ecological systems). A good starting point for understanding a curious phenomenon or unclear anomaly, from a scientific perspective, is to try to fill in the four boxes in a blank chart of this form, first with the concepts and variables that apply for each box and each arrow between the boxes, and secondly (Chart I-A) a with the suggested questions that ought to be asked in order to come up with a solution to the key or crucial or defining problem to be addressed in a Social Problem Solver procedure. This approach may be enhanced by applying extant theories to the chosen situation or problem (e.g., perhaps based on Slawski's summaries of the sixteen most basic theories in *Social Psychological Theories*, 2004, or summaries of more macro level sociology, such as seen in Jon Turner's modern sociological theories texts (in multiple additions), with their lists of main hypotheses, or the more typological texts of G. Ritzer).

The flow diagram presumes a research oriented approach wherein the basic building block of any theory is recognized to be the hypothesis, a statement equivalent to cause and effect, or developmental antecedent and consequent, of the general form "IF something occurs, THEN something else specific will follow." At very least, this approach, starting form a small number of basic and interrelated hypotheses (Homans on hypotheses, R. Merton on codification) will help to summarize the essence of several alternate explanations so that they can more easily be compared in testable form (for everyday scientists) rather than presuming a highly abstract, axiomatic, or abstruse philosophical sophistication or imagination to be indulged in only by an elite and rarified oligopoly of scholars. The browser or reader here should keep in mind the definition of a theory presumed (as per Homans, et al, 1967) is 'a set of deductively interrelated hypotheses.' This does not mean that such a set is the starting point, or even the end point, but only that such a statement should appear somewhere in a central position in each piece of scientific writing or discourse. The typical chronology of scientific or systemic inquiry does not necessarily hold a preferred starting point, such as: "In the beginning, State Your Central Hypothesis." Experience and imagination will in most cases direct the budding researcher or theorist toward a first point of focus. The message should be that somewhere there should be a statement in each published work of a limited number of interrelated, and empirically testable hypotheses.

II. The second layer of inquiry suggested here is that of stimulation by whatever means is congenial to the thinker or researcher of the implications from prior theories or methods of imaginative playing with ideas, so that the thinker's mind engages in cognitive *SATURATION* with the main points of the investigation from all plausible perspectives, without omitting the possibilities for serendipitous discovery or insights. The top level picture here is seen in Chart II, Media for Understanding, (Slawski: 2000), taking the form of cross-classification of scientific and humanistic approaches on the horizontal dimension with theoretical to concrete modes on the vertical dimension. The main message of this representation is to remind the reader of the normal way to use human imagination, focusing, preoccupation with, relaxing and concentrating again and again on the issues or problems to be understood if not resolved or managed.

III. All of the previous statements, pre-hypotheses, conceptualizations, typologies, and the like, without the required statement of at some point "deductively interrelated hypotheses," remain at the PRE-theoretical level of scientific development, designated in the chart as **ahP**, standing for ad hoc PRE-Theory. Chart III, on three ascending levels of TRUE GST (General System Theory), attempts to show possible *PRIORITIZING* sophisticated examples of general theory are found or developed. GST is characterized at a root level as cross-level, bridging concrete levels of analysis, such as from the organism to the group, community or society (reminding us of JG Miller's 9 designated concrete levels of Living System Theory, 1978). There are in fact very, very few theories that reach this level to date. In any case the author proposes that the most basic of the three levels of TRUE GST is **LPC** [Limited, Problem (or Issue) Centered], limited in scope and number of concepts and hypotheses in order to keep the formulation within manageable boundaries. The second, or middle level, is designated **PAM**, standing for

Pure Abstract Multi-Level, or concept-centered, formally stated, and highly integrated theory. The top or third level of true GST is here designated **CESP**, standing for Comprehensive Eco-Sophical Policy, in other words, a true and general theory with implications applied to solving concrete problems for the ecology or survival of the earth and its inhabitants.

IV. Once the scientific inquirer has found or stated a theory, at any level of analysis or generality, it is essential to evaluate it in comparison with other competing or rival
[True GST]

theories. The author long ago sifted through the potential criteria and developed a rationale, leading the 4 main CRITERIA FOR A GOOD THEORY (*Zeitschrift fur Soziologie*, 1974). This is perhaps the most critical point of the current presentation, and will be elaborated with more detail than the other sections. It can be focused on Chart IV, a listing of the four criteria set up to compare at least two theories with side-by-side _RATING_. Each individual rating should be evaluated in relation to concrete facts of the case being dissected with the two or more theories.

The four main criteria have been elaborated (in the lower layers of the poster display, or theoretical underpinning of the statement of the four main criteria) into eleven that can be applied to either physical, biological, or social scientific theory applications. Further, more detailed specification of the criteria into a total of 33 have been done for policy theories and for helping procedures (as kinds of soft systems "theories")

CRITERIA FOR EVALUATING QUALITY of Research or Creative
Scientific Activity for presentation at annual meetings or in-print publications:

Making use of the four main criteria, along with some preliminary creative criteria, there follows a list that might prove useful for those reviewing papers for acceptance and presentation at meetings and conventions of scientists at many professional associations. To what extent does this paper or proposed presentation do the following?
A. CONTRIBUTE TO:
 *The theme of the conference (as per president's Call for Papers).
 *The objectives of the association (such as the ISSS, as per bylaws), especially regarding
   the search for or use of the parallels or isomorphism across levels of scientific analysis,
   especially when the parallels promise to lead to an integrative synthesis, as well as
   ultimately to the betterment of humanity.
 *Incorporate or append a short (or long) but thoughtful, penetrating, or provocative list
   of discussion questions.
  Copies of these discussion questions could be distributed or listed in advance in large, readable letters, on a display or chalk-board, and introduced say after a ten-minute initial review of the formal paper contents. Ideally, the formal papers would have been made available and read by as many persons as possible before the start of a given session. This in turn would be facilitated by ready availability of CD-ROM readers near the registration desk, or through availability in some central location of three hard copies of the total proceedings. This would also be an aid to those whose native language was not English.

B. STYLE OR FORM:
*Keep within the page limits stated in advance.
*Observe correct grammar and spelling.
*Maintain adequate referencing and footnoting.
*Clarity of overall message(s).
C. CONTENT:
*The text should (at least somewhere) state the author's working definition of
  "THEORY" per se.

Theory could be defined as philosophy, meta-theory, a collection of concepts, typologies, a model (graphic or verbal), a set of processes, etc., that is amenable to empirical investigation. "Systems education" could for example be considered a "soft systemic model." Ideally a scientific theory is defined as "a set of interrelated hypotheses" that explains change or development over time.
*Review a range of prior written work on the subject matter covered, upon which the
  present paper builds, transforms, supplants, re-assesses or rethinks.
*Gives due consideration to, or enhances the possibility of comparing two or more
  theories in a more or less systematic manner.
*States how to combine theory, method, and practice or at least potential applications, in
  terms of verifiable, i.e., testable hypotheses (typically including plausible but explicitly
  stated assumptions and accompanying definitions, whether the definitions are
  operational or conceptual).
*Originality.

D. Measures up (on a loose rating scale) to a minimum satisfaction level on each of four criteria for a GOOD THEORY, namely:
1. Ease of Application or TESTABILITY,
2. INFORMATION VALUE (describing what happens),
3. PREDICTABILITY (or postdiction or retrodiction), and ultimately,
4. EXPLANATORY POWER (the most essential criterion of all, showing WHY change occurs).

These criteria are described below and displayed in Chart #IV. They can be expanded with subordinate criteria under each of the four into as many as 33 criteria (Slawski, ISSS *Proceedings*, 1994) which will vary a bit depending on whether the content of the paper is pure theory or soft system methodology. They could be rated in a table with numerical ratings, say a (0-4) scale, with 4 being "high." It should be possible to give reasons for each rating even if they are not explicitly stated in an evaluation.

The table below assumes that two or three theories are being compared in the quality of their application to the same case of change in a person or group over time, before and after some crucial intervening event. Ideally more than one theory should be comparatively evaluated one after the other, even though only one may be the primary focus.

DETAILS ON THE FOUR CRITERIA FOR EVALUATING A GOOD THEORY

References are from Slawski's *Social Psychological Theories: A Comparative Systems Handbook for Students* (1992/2004). The following is an extract with a few modifications. Only slight changes in wording were needed to apply the criteria to research and cases in the physical sciences. Management science of course is a form of applied social science.

With the preceding overview of the nature of scientific theory, theoretical problems, and the modes of theory construction, the student or scholar has the seeds of what to look for when approaching a new (social or physical) theory or problem. Innumerable other considerations could be discussed which, for certain limited, say classificatory purposes, might shed some light on the philosophy, substance, or methodology of social science. The number of possibilities is so great that many theorists and philosophers have alternatively written books and been baffled by the problem of evaluating theories comparatively. Classification, however, is not enough. Nor is it sufficient to analyze one theory at a time. Because of the complexity and abstractness of theories and evaluative criteria, we need a point-by-point comparison of two or more theories at a time. This approach is not only theoretically sound, not to mention neglected, but also pedagogically crucial. It is quite clear in addition that to compare two complex theories as a whole is a task suitable only for genius. Thus, our approach will be to suggest comparison of the main points of two or three theories at a time, as applied to a single instance of personal or social or physical change over time.

Our long-ago previous task has been to reduce the huge number of possible evaluative criteria to the most important ones, without leaving out anything really essential to the nature of theory. On these grounds, four criteria seem necessary (cf. Slawski: 1974, *Zeitschrift fur Soziologie*). In a natural chronological order of use for evaluating theory, they are: (1) ease of application, (2) information value, (3) predictability, and (4) explanatory power.

1. Ease of Application or Testability
In common-sense applications of a theory, the relative ease of application depends on the understandability of the theory to the persons using it, and the degree to which the terms and hypotheses of the theory fit the facts of the case under analysis. Social (and physical) scientists, however, are more likely to go beyond the intuitive and examine the question of testability of a theory. It involves the extent to which the variables can be separately and reliably measured by different researchers. If we could not measure the concepts, our theory would not be falsifiable, but rather be a tautology or mere opinion. We could not then gather evidence for and against the validity of the hypotheses contained in the theory. A result of testability is the degree to which the theory is productive for those doing research. That is, how fruitful is it in generating evidence? Testability also involves the applicability of the theory to real-life events. Ideally, a tested theory should be applicable to policy decisions of administrators, or perhaps to recommendations and therapeutic methodologies of counselors and organizational change agents. Furthermore, a testable hypothesis is methodologically sound. The form of the theory as a whole must

be clear, simply or economically stated, complete in application to the events to be explained. It should be elegantly stated as well (Mullins: 1971). Finally, the indicators of each concept of the theory should be observable in a way that will allow us to quantify them. As a final word, it should be clear that for a student who has not yet had a course in (social or physical scientific) research methods, these points about testability) can be safely passed over lightly. He should instead focus simply on the ease of application of the perspectives presented to events and experiences in his own group life.

2. Information Value
Once we discern that a theory is applicable to the case under consideration, it is natural to look at the criterion of information value. Here we ask the questions: How well does the theory help us to describe what actually happens, the nature of the events and their sequence? Do the range and quality of the concepts and hypotheses of the theory focus our attention on the meaningful and significant, on facts and solid ideas rather than on mere opinion, the trivial or tautologous? An informative theory is also proximate to experience rather than purely conceptual.

3. Predictability
The third crucial criterion for judging a theory is its predictive potential. Are the variables related in causal or functional statements? Do the statements tell us, for example, that if and when A happens, B will follow? Naturally, if we can predict, then we can more easily control our destiny, or at least set limits to it. Another aspect of prediction is postdiction, which is prediction of events occurring at time 2 (after the turning point) from the events or circumstances at time 1 (before the turning point), but making that prediction at a point in time after both time 1 and time 2 events have already transpired, or even where data have already been collected on both points or periods of time. We may be able to predict, however, on the basis of past experience alone, through correlations, even without being able to explain why the prediction held true. This brings us to the fourth, and most important, of the criteria for judging a theory, namely, explanatory power.

4. Explanatory Power
Explanatory power is the essence of a theory. It tells how well a theory shows why there was change or stability in a person or group over a given period of time. More broadly, it tells why what actually happened did in fact occur. Finally, it evaluates how well the hypotheses of the theory order the data, the basic concepts, relationships, and assumptions. Explanation is another word for theory. It goes beyond prediction. Prediction without reasons, without knowledge of conditions, causes, or motives is a useful happening, but a poor substitute for understanding. If we understand, we will also, of course, be more able to predict. Thus, with these four criteria, we have a very general but very powerful means of comparing and evaluating virtually all perspectives that could be called General System Theory, or the realm of integrative science.

V. After examining the ideal forms and the criteria for evaluating them, we can finally move on to an examination of several cases of applications of extant theories. Without going into detail on each example, and as a way and example of _CODIFYING_ general theories, Chart V, arrays abbreviations of 13 hypotheses in a classification system,

shortened from a more complete list of 27 derived from or attempting to summarize the essence of (Miller's) LST and some other lesser versions of GST. To understand this would take repeated periods of rumination of the list of actual hypotheses, perhaps along with their implied positive prescriptions for social and ecological betterment.

To give the reader the flavor of a possible explanatory result, the 13 most crucial hypotheses are gathered (in parallel to corresponding prescriptions for action) in Chart # V-i.

VI. An example of a true theory, at the top layer, in Chart # VI, in starkest, most parsimonious terms, in virtually axiomatic format, represents an ideal form of *ILLUSTRATING* a true, good and General System Theory. Based on numerous theoretical papers related to conflict resolution, a prime example is that of (A. Naess, 1958, on) Gandhian ethics (encompassing a statement of the four main concepts as norms, ending with 5 hypotheses and two main prescriptive norms, in Chart # VI-c). The hypotheses and norms should be self explanatory (from the statements in the tabular chart just under the top layer, the axiomatic causal diagram.
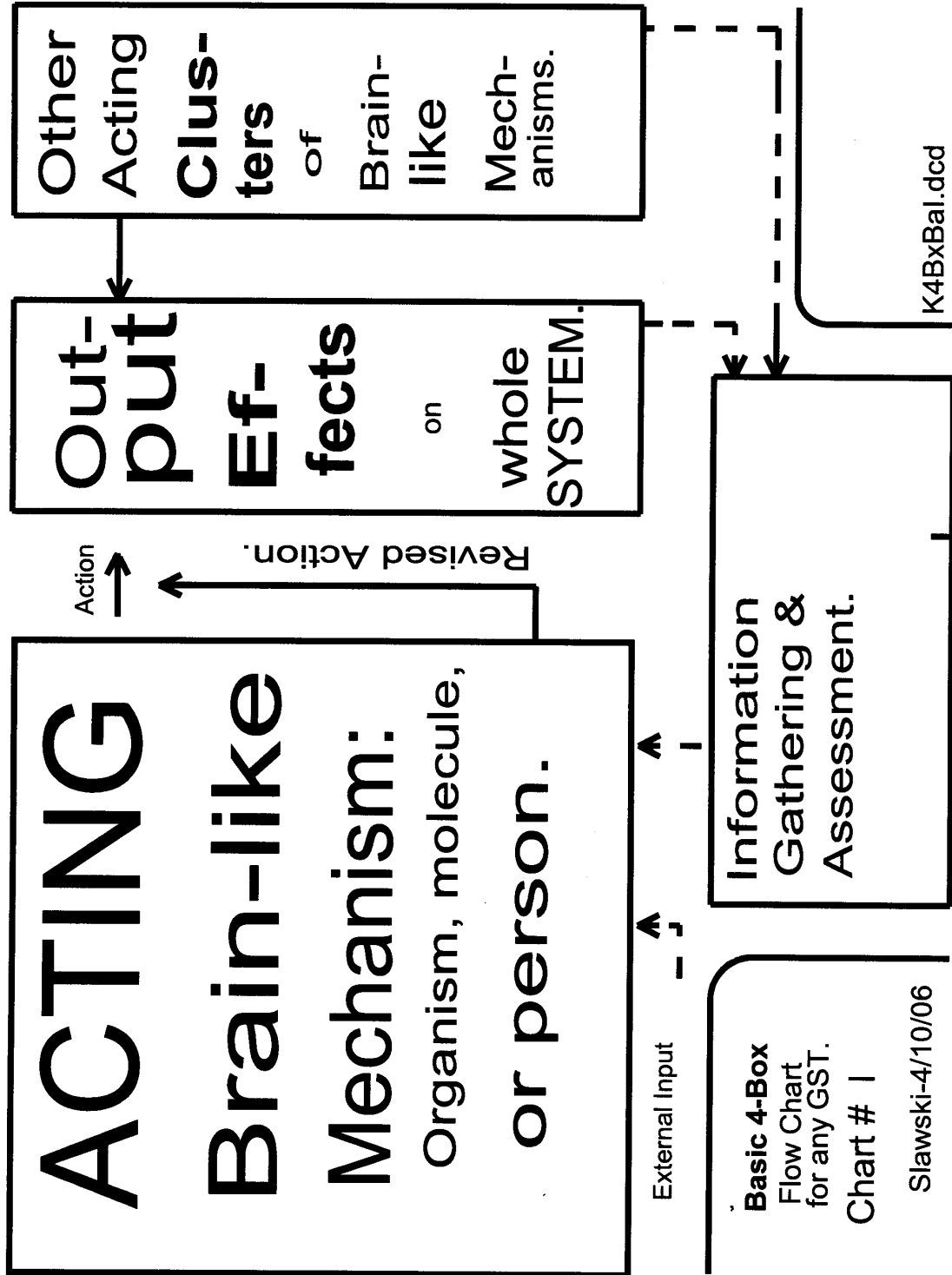
Overall, in review, we have tersely presented a potentially insightful procedure for developing true, good and General System Theories by generic creativity techniques of sorting, saturation, prioritizing, rating, codifying, and illustrating their use.
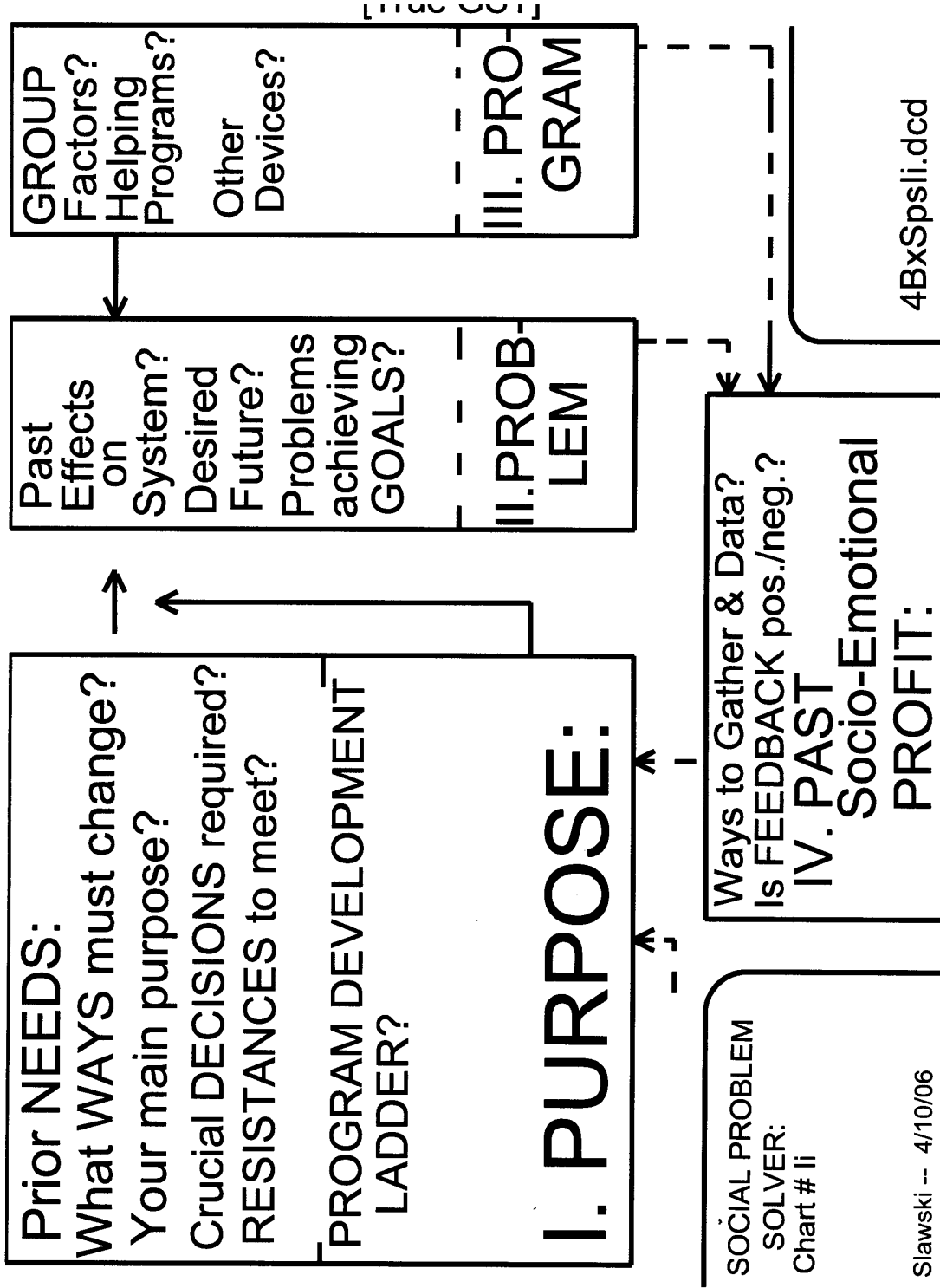
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Other Acting **Clusters** of Brain-like Mechanisms.

Out-put Ef-fects on whole SYSTEM.

Action

Revised Action.

ACTING Brain-like Mechanism: Organism, molecule, or person.

Information Gathering & Assessment.

External Input

Basic 4-Box Flow Chart for any GST. Chart # 1

Slawski-4/10/06

K4BxBal.dcd

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[True GST]

GROUP
Factors?
Helping
Programs?

Other
Devices?

III. PRO-
GRAM

Past
Effects
on
System?
Desired
Future?
Problems
achieving
GOALS?

II. PROB-
LEM

Prior NEEDS:
What WAYS must change?
Your main purpose?
Crucial DECISIONS required?
RESISTANCES to meet?

PROGRAM DEVELOPMENT
LADDER?

I. PURPOSE:

Ways to Gather & Data?
Is FEEDBACK pos./neg.?
IV. PAST
Socio-Emotional
PROFIT:

4BxSpsli.dcd

SOCIAL PROBLEM
SOLVER:
Chart # Ii

Slawski -- 4/10/06

1.0

MEDIA For UNDERSTANDING — Chart # II

THEORETICAL

Typology
PARADIGM
Tables

Archetype

Myth
Ritual

-E-

HUMANE

Art
Mantra
Mandala

[Empathy]

STORY
DRAMA
Biography

True Love.

HYPOTHESIS
Concepts

Textual
Hermeneutics.

Metaphor

SCIENTIFIC

-W-

Graphics
Mapping
Photographs
Film & Tape

Sense
Measures.

CONCRETE

Levels of **"TRUE" GST**
Chart # III

3. **COMPREHENSIVE** **ECO-SOPHICAL** **POLICY.**	CESP
2. **PURE ABSTRACT** **MULTI-LEVEL.**	PAM
1. **LIMITED PROBLEM,** **CROSS-LEVEL.**	LPC
A. *ad hoc* PRE-Theory	ahP

[Slawski --- 3+ 4/9/06 --- 4LvLTth3.fc5]

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COMPARATIVE RATING TABLE: Chart # IV

Good Theory Criteria below:	Theory #1	Theory #2
1. **TESTABILITY** or **Ease of Application**: [Looking + Scaling]		
2. **INFORMATION VALUE**: [Describe WHAT.]		
3. **PREDICTABILITY** [T1 + E →T2: WHEN?]		
4. **EXPLANATORY POWER** [WHY?]		
Total Scores:		

Scale: (0-4), 4 being "high" on each criterion.
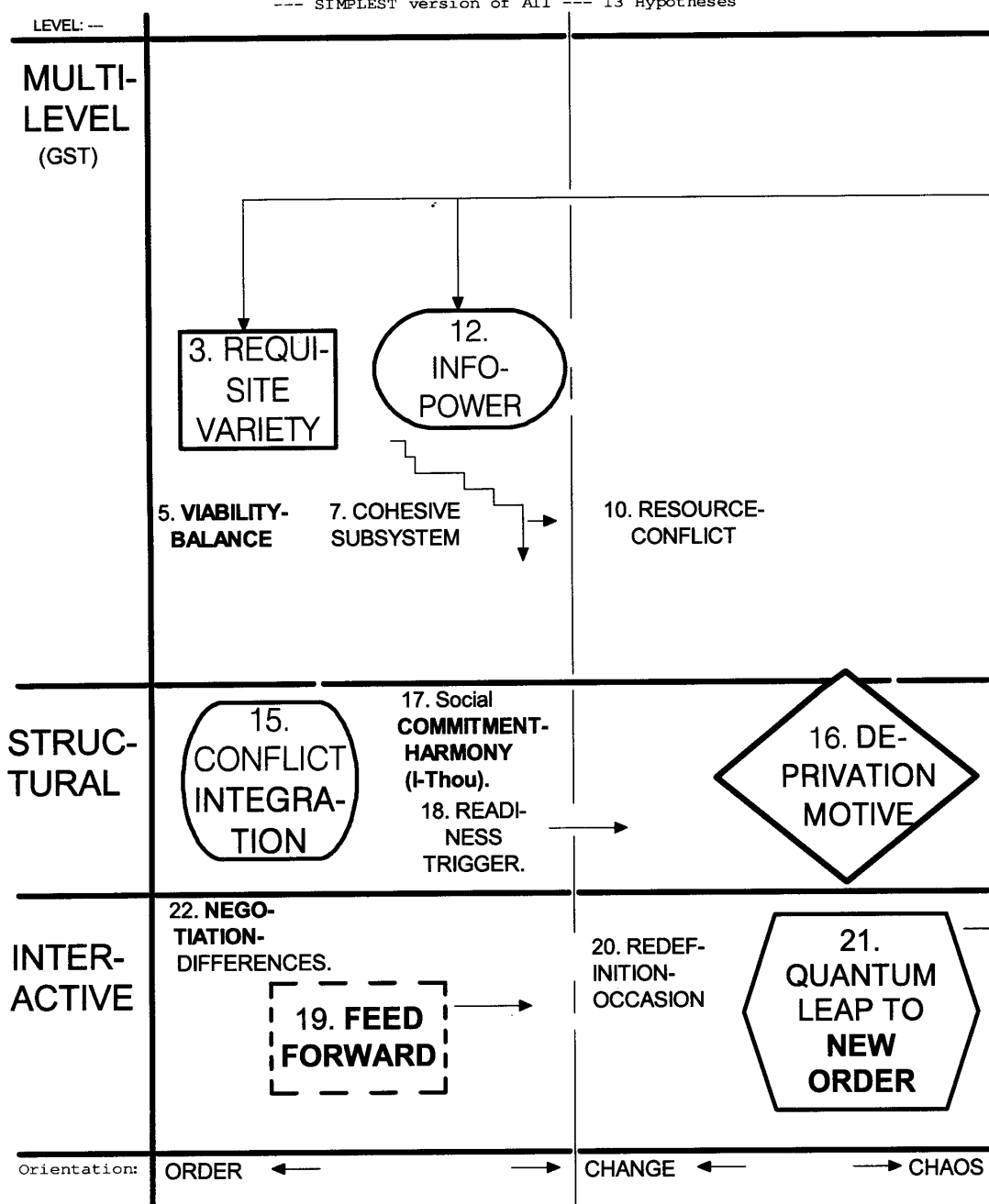Justify each rating number with explicit verbal description.

[Slawski --- 3/5+ 4/9/06 --- 4CrtTbIV.doc]   ,

TABLE # V   [True GST]

SYSTEMIC CAUSES: ORDER, CHANGE & ACTUALIZATION

--- SIMPLEST version of All --- 13 Hypotheses

LEVEL: ---		
MULTI-LEVEL (GST)	**3. REQUI-SITE VARIETY** 12. INFO-POWER 5. **VIABILITY-BALANCE** 7. COHESIVE SUBSYSTEM	10. RESOURCE-CONFLICT
STRUC-TURAL	15. CONFLICT INTEGRA-TION 17. Social **COMMITMENT-HARMONY (I-Thou).** 18. READI-NESS TRIGGER.	16. DE-PRIVATION MOTIVE
INTER-ACTIVE	22. **NEGO-TIATION-DIFFERENCES.** 19. **FEED FORWARD**	20. REDEF-INITION-OCCASION 21. QUANTUM LEAP TO **NEW ORDER**
Orientation:	ORDER ⟵ ⟶ CHANGE ⟵ ⟶ CHAOS	

In general, within each level, the lower numbered hypotheses are the most basic. Higher numbered ones are more complex and interactive, more applicable to human interaction. The dividing line down the middle roughly divides the orientation toward order (at the left), or (in the middle) routine change, or chaos (at the right). Heavy arrows are the most logically direct routes to a new order. There are missing numbers because only 13 of 27 from the complete list are included. This version has dropped out all direct connecting arrows. Follow upper left to lower right for a loosely causal sequence. Suggestion: Evaluate by starting from upper left; move to lower right. BOLD letters mark key nodes of order, plus the main causes of change.

[Slawski--ScocaXs. pdq, 3+8/97, 3+ 4/9/06 - ScocAcV. fc5]

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13 **CHANGE HYPOTHESES** --- With PRESCRIPTIONS & Case: Chart # V-i

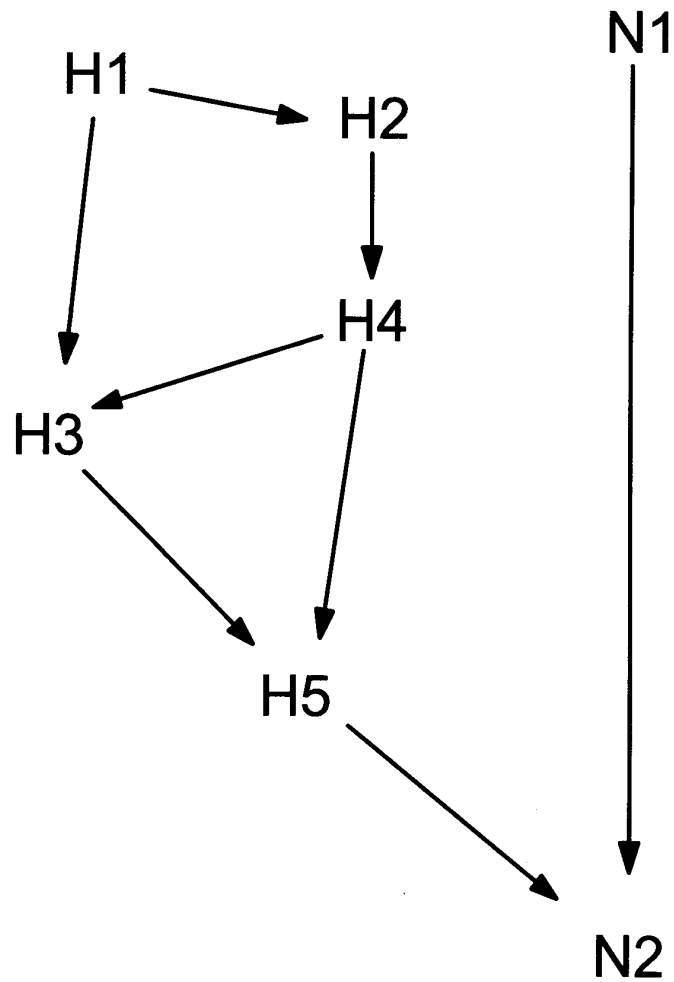| Simplified, Generic GST *Core* HYPOTHESES:	PROVERBS or Corresponding PRESCRIPTIONS:	RATINGS & Comments on CASE:
3. REQUISITE VARIETY: *(D) Regulator variety limits amount of regulation attainable.	Cultivate adaptation skills or mechanisms as a high priority.	
5. VIABILITY-BALANCE: (D) Viability depends on the balance of 1) autonomy of sub-system vs. integration of system whole, and 2) stability vs. adaptation.	Cultivate a/symmetry as necessary for survival and growth.	
7. COHESIVENESS SUBSYSTEM: (D) The more cohesive each subsystem, the less cohesive the total system.	Weaken total system to make subsystem more cohesive, and vice versa.	
10. RESOURCE-CONFLICT: * (D) The greater the resources available to a system, the less likely is conflict among its subsystems.	Provide sufficient resources to avoid undesirable internal (and supra-unit) conflict.	
12. INFORMATION-POWER: (D) The system component with the most relevant information is the one most likely to exercise power over components.	Units needing power should Seek help from the actor or unit with the most relevant information.	
15. CONFLICT-INTEGRATION: * (D) The more conflict promotes a) increase in creativity, b) release of hostilities, c) normative regulation, d) awareness of realistic issues, and e) associative coalitions, THEN the greater will be the internal social integration, and the greater the capacity to adapt to a system's environment.	In order to adapt to a changing environment, cultivate conditions for adaptive, creative, realistic conflict, with multiple overlapping coalitions.	
16. DEPRIVATION-MOTIVE: * (D) Relative deprivation is a central motive for initiating change in relationship patterns.	Use relative deprivation as an incentive for desired change.	
17. SOCIAL COMMITMENT-HARMONY: (D) The more members of a community carry out worthy social commitments, including vocations of service, the more there will be self and social actualization.	Urge and give meaningful incentives to reach social commitment among community members.	
18. READINESS-TRIGGER: (D) When the social structure is strained and psychological readiness is peaked, then any convenient trigger may induce change.	To induce change, wait for the right moment to trigger it, social, psychological, or physical.	
19. FEED-FORWARD: * (D) When there is constructive feedforward, then the most influential actors will likely promote an improved, even a more newly enlightened, ecological and social order.	Cultivate appropriate feedforward to promote an optimal new order.	
20. REDEFINITION OCCASION: (D) When the parties redefine the situation, then new patterns will occur.	Redefine the situation to allow desired new patterns to occur.	
21. QUANTUM LEAP TO NEW ORDER: (D) When there is broad but workable perturbation, together with a ready critical mass of proponents, then there will more likely occur a quantum leap.	Workable disturbance, with Workable disturbance with ready carriers of the message (or intent), can promote a quantum leap to a better order.	
22. NEGOTIATION-DIFFERENCES: *(D) Ability to negotiate differences will promote harmony and understanding.	To promote unity and understanding, practice the art of negotiation.	
See more complete statement of hypotheses in author's 1995 ISSS Proceedings paper, "A General Theory..." (D) = Radically Central Hyp. [6 in number here].	*** Among the above 3 groups from the original 27 hypotheses, 1-14, fall largely into the FACTISM paradigm, which includes GST. BEHAVIORISM encompasses 15-18. DEFINITIONISM encompasses 19-27. (D) = in short *Diagram* [of 13, so marked in chart list of 27].	Slawski -- 13GtHyVi.doc, 596, +1096+ 397+899, 3+ 4/9/06 .

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GANDHIAN ETHICS of Conflict Resolution: Chart #VI

Principles, Hypotheses and Norms:	Cases?

Essential principles of Gandhi's thought (from German pamphlet of unknown specifics):
1. Ahimsa **[NOT HARMING ANOTHER]**.
2. Satyagraha **[Seek TRUTH]**
      Combining 1 & 2 results in **non-violent confrontation** or resistance to unjust practices.
3. Brahmacharya [loosely translated into generic terms as self control, sublimating lower desires by *PURITY OF INTENTION* or even attunement with a more universal audience]
4. Swaraj & Swadeshi
      [SELF HELP and Home Rule]	

*N1 (personal level): Seek complete **self-realization**.	
*H1: Complete self-realization presupposes you **seek truth**.	
*H2: All living beings are ultimately one.	
*H3: Violence against yourself makes complete **self-realization** impossible.	
*H4: Violence against any living being is **violence against yourself** [derived from H2].	
*H5: Violence against any living being makes complete **self realization** impossible [derived from H3 & H4].	
*N2: Realize **non-violence** and **seek truth** [derived from N1, H4 & H5].	
N1 (group level): Act in group struggle and act, moreover, in a way conducive to long-term, universal, maximal **reduction of violence**.	

Norms (N) and hypotheses (H) from A. Naess (1958), J. Conflict Resolution II, 2: 140-155.
Bold indicates dependent variables or expected outcomes. [Slawski --4/9/06—Gand8hVI.doc]
See accompanying flow chart subtitled "**A TRUE THEORY**."

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Gandhian Ethics of Conflict Resolution:
A TRUE THEORY from A. Naess.

N1

H1 → H2

H1 → H3

H2 → H4

H4 → H3

H4 → H5

H3 → H5

H5 → N2

N1 → N2

H = Hypothesis.
N = Norm.

Chart #
VI-c

[Slawski --- GeCResVI.fc5--- 3+ 4/9/06]

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