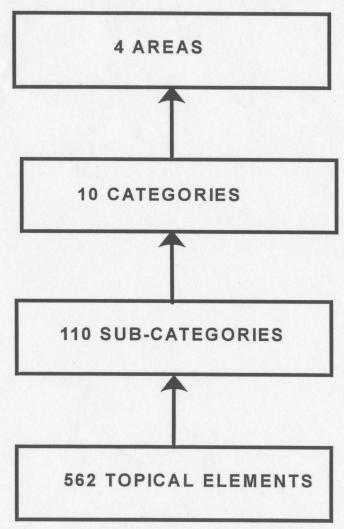
office Sile

CATEGORIZING COMPLEXITY

- ★ From over 500 transparencies ... 10 Categories and 4 Areas
- **★** From 21 Essays on Complexity 6 Categories
- ★ From 20 Laws of Complexity 3 Categories one with 3 Subcategories

John N. Warfield George Mason University Mail Stop 1B2 Fairfax, VA 22030-4444 August, 1998 Cow105.wpd

CONSTRUCTING CATEGORIES FROM OVER 500 TRANSPARENCIES (Read the arrow as "ARE INCLUDED IN")



ORGANIZING COMPLEXITY FROM THE BOTTOM UP

CONSTRUCTING CATEGORIES FOR COMPLEXITY FROM OVER 500 TRANSPARENCIES

THE TEN CATEGORIES

A. SCIENCES

(124+)

F. EDUCATION

(48+)

B. LANGUAGE

(97+)

G. ORGANIZATIONS

(42+)

C. HUMAN BEING

(75+)

H. REASONING

THROUGH

RELATIONSHIPS

(27+)

D. MODELS

(64+)

I. FORMALISMS

(19)

E. PROCESSES

(49+)

J. THOUGHT LEADERS

(17+)

cow132.wpd

CONSTRUCTING CATEGORIES FOR COMPLEXITY FROM 21 ESSAYS ON COMPLEXITY

THE SIX CATEGORIES

- A. ORGANIZATIONAL ENHANCEMENTS (10)
- B. ORGANIZATIONAL FLAWS (5)
- C. SCIENCE AND ORGANIZATIONAL BEHAVIOR (3)
- D. LINGUISTIC CONSTRAINTS (1)
- E. VIEWS ON COMPLEXITY (1)
- F. UNIVERSITY REDESIGN (1)

GAVEGORIES FIEED: ESSAVS ON COMPEDATION

(Showing how 21 essays on complexity are categorized, revealing the key areas of study)

| | | | D. SCIENCE | | |
|---|---|---|--|--|---|
| A. ORGANI- ZATIONAL FLAWS | B. LINGUISTIC CONSTRAINTS | C. VIEWS ON COMPLEX- ITY | AND ORGANIZA- TIONAL BEHAVIOR | E. ORGANIZA- TIONAL ENHANCE- MENTS | F. UNIVERSITY REDESIGN |
| • Technomyopia Threatens Our National Security (1) | • Procrustes is Alive and Well and Teaching Composi- tion in the English Department (5) | • Five Schools of Thought About Complexity: (13) | • Spreadthink: Explaining Ineffective Groups (8) | ●The Learning Organization: Its Relevance to Policymaking (3) | • The WAND- WAVER SOLU- TION: Creating the Great University (11) |
| • Some Magnificent Academic Trusels and Their Social Conditions (2) | | | • Demands of Complexity on Systems Science (9) | • Accelerating Productivity of Industrial Organizations (6) | |
| • Widely-Ignored Subtleties that are Critical to Decision- Making (4) | | | • Twenty Laws of Complexity: Studies in the Abuse of Reason (17) | • Structural Thinking: Organizing Complexity Through Disciplined Activity (10) | |
| • Groupthink, Clanthink, Spreadthink, and Linkthink (7) | | | | • The Corporate Observatorium: Sustaining Management Communication and Continuity (14) | |
| Mentomology: The Identification and Classification of Mindbugs (12) | | | | • A Platform for Sociotechnical System Design (15) | |
| | | | | • A Role for Formalisms in Integrative Studies (16) | |
| | | | | • The Problematique: Evolution of an Idea (18) | |
| | | | | • Readings for Bureaucrats (19) | |
| category names an numbers assigned | rs of the alphabet as: re for ease of referen to the titles of essay | • Seven Ways to Portray Complexity (20) | | | |
| | nce in which the esso document titled "ESS | | | • A New Index of Complexity: The Aristotle Index (21) | |

CATEGORIES OF 20 LAWS OF COMPLEXITY

BEHAVIORALLY-BASED (70%) -14 Laws

- Habitual (behavior that people display without giving much thought to it, but which can be changed) – 7 Laws
- Organizational (behavior that people display when they are operating inside an organization, and are subject to its constraints, and which they believe can be changed only at considerable personal risk) - 5 Laws
- Physiological (behavior that people display as a consequence of their physiology, and which is not easy or even impossible to change) - 5 Laws

MATHEMATICALLY-BASED (30%) - 6 Laws

MEDIA-BASED (10%) - 2 Laws

NOTE: Some Laws appear in more than one category.

cow133.wpd

| CATEGORIES OF LAWS OF COMPLEXITY: | BEHAVIORALLY-BASED (70%) | | | MEDIA- | матнема- |
|--------------------------------------|--------------------------|--------------------|---------------------|----------------|---------------------|
| cow134.wpd NAME OF LAW | HABITUAL | PHYSIO- LOGICAL | ORGANIZA- TIONAL | BASED (10%) | TICALLY BASED (30%) |
| 1A Triadic Compatibility | | • | | | |
| 1B Requisite Parsimony | | • | | | |
| 2 Structural Underconceptualization | | • | | • | |
| 3A Organizational Linguistics | | | • | | |
| 3B Vertical Incoherence | | | • | | |
| 4 Validation | | | | | • |
| 5 Diverse Beliefs | • | | | | |
| 6 Cradation | | | | | • |
| 7 Universal Priors | • | | | | |
| 8A Inherent Conflict | • | | | | |
| 8B Limits | | | | | |
| 8C Requisite Saliency | • | • | | | |
| 8D Success and Failure | | | | | • |
| 8E Uncorrelated Extremes | | | | | • |
| 8F Induced Groupthink | • | | • | | |
| 9 Requisite Variety | | | | | • |
| 10A Forced Substitution | | | • | | |
| 10B Precluded Resolution | | | • | | |
| 11 Triadic Necessity and Sufficiency | | | | | • |
| 12. Small Displays | • | | | • | |