



***CIVIL SOCIETY DIALOGUE***  
***And***  
***NEW TECHNOLOGY OF DEMOCRACY***

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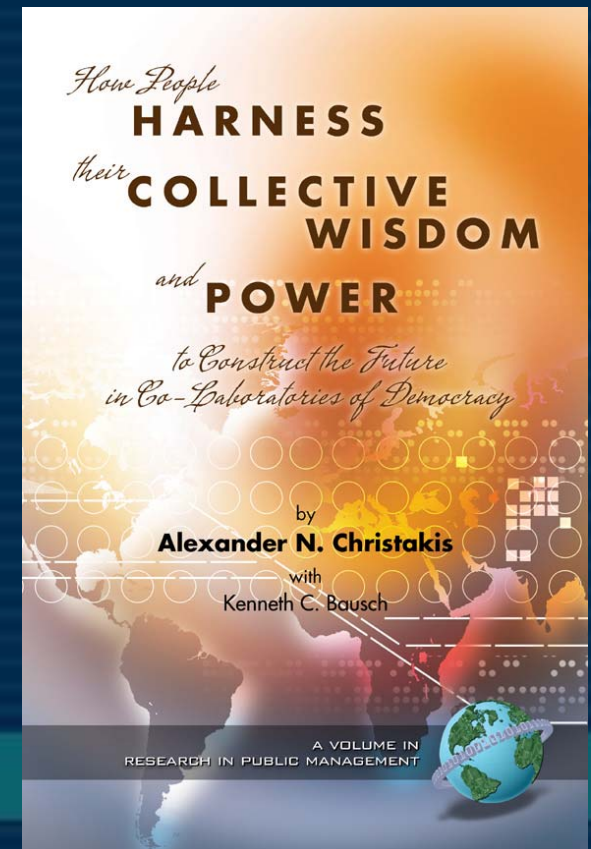
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[www.globalagoras.org](http://www.globalagoras.org)

**Harnessing Collective Wisdom**

# How People Harness their Collective Wisdom & Power to Construct the Future in Co-Laboratories of Democracy

Alexander N. Christakis / Information Age / February 2006



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# Structured Dialogic Design Process (SDDP)

**Why New Technology for Democracy?**

**What do *we* mean by Dialogue?**

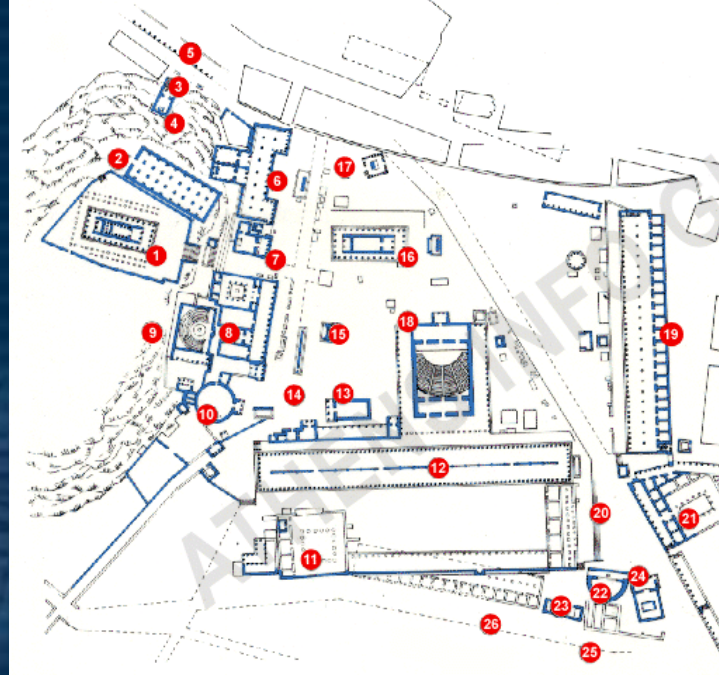
**What is the Science of Dialogic Design?**

**What is the Methodology of the Science?**

**How is SDDP applied for the Cyprus Civil Society Dialogue project?**

# WHY NEW TECHNOLOGY FOR DEMOCRACY: The Floor Plan of the Athenian Agora

PLAN OF THE AGORA - II CENTURY AD.



1. Temple of Hephaestus
2. Hellenistic building
3. Sanctuary of Demos and Graces
4. Temple of Aphrodite Ourania
5. Stoa of early Roman date
6. Stoa of Zeus Eleutherios
7. Temple of Apollo Patroos
8. Metroon
9. New Bouleuterion
10. Tholos
11. Heliia
12. Middle Stoa
13. Roman temple
14. Eponymous Heroes
15. Altar of Zeus Agoraios
16. Temple of Ares
17. Altar of the 12 gods
18. Odeion of Agrippa and Gymnasium
19. Sota of Attalos
20. East stoa
21. Library of Pantainos
22. Nymphaeum
23. Southeast fountain
24. Southeast temple
25. Mint
26. South stoa



# WHY NEW TECHNOLOGY FOR DEMOCRACY:

## The Agora of the Global Village (The Universal City: Ecumenopolis)



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# COMPARING TWO AGORAS: Situational Complexity Index (SCI)

**SCI = DK(N-7)/R(R-1); where D= (V-5)/(N-5).**

**N = Total number of observations by M observers**

**V = Number of observations with 1 or more votes**

**K = Number of distinct connections among the observations in a digraph**

**R = Number of distinct observations in the digraph**

**D = Divergence or “spreadthink” of importance voting by the M observers**

**7 = The Miller magic number of “7 +- 2**

**5 = The Warfield “spreadthink” number**

# ESCALATION OF COMPLEXITY

- **The Average SCI for the Athenian Agora = 3**
- **The Average SCI for the Global Village Agora = 30**
- **COMPLEXITY ESCALATION BY AN ORDER OF MAGNITUDE**

**NEED A NEW TECHNOLOGY FOR  
DEMOCRATIC DIALOGUE  
In the new agoras of the  
Global Village**

**STRUCTURED DIALOGIC DESIGN PROCES (SDDP):  
THE NEW TECHNOLOGY OF DEMOCRACY  
APPLIED TO THE CYPRUS CIVIL SOCIETY DIALOGUE**



# What do we mean by Dialogue?

**Facilitated, structured open and focused INQUIRY of problem situation:**

**Often “mixed-presence,” both collocated & virtual**

**Committed participants seeking *understanding & action***

- Stakeholders have diverging agendas & power differences
- Cannot be solved by top down decision

**Complex problem, unresolved by usual means**

- Complexity requires discipline & structure

**Dialogue is divergent (*generative*) and convergent (*strategic*).**

- Balances power & generates agreement based on understanding
- Dialogue is democratic and redistributes power

# A Co-laboratory of Democracy



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# Typical Group Meetings Misadventures

## What usually happens? Even with conventional facilitation:

- ✓ Group discussion wanders
  - ✓ Those with power use it to settle differences
  - ✓ Iterative discussions take hours, even weeks
  - ✓ Group work products of uneven quality or usefulness; No standard meaningful output
  - ✓ *Not democratic*: Experts settle the issues they “own,” relieving burden of learning
  - ✓ *Not participatory*: True diverse stakeholder sessions are rare, “customers” have no say

# Rationale for the Practice of SDDP

- **True dialogue is essential to excavate collective wisdom (DEMOSPHIA), and to make democracy work.**
- **Dialogue is very difficult in today's organizational mindset.**
- **Complexity of issues demands we address them collaboratively, systematically, & systemically.**

# SDDP unequalled for:

- *Futures design* – Normative, futures-creative design with stakeholder participation, collaboration, and consensus (e.g., Cyprus Civil Society Dialogue).
- *Participatory policy making* - Democratic, transparent consensus building & decision making.
- *Eliciting & structuring collective wisdom (DEMOSOPHIA) for complex problem resolution* – Drawing best ideas forward & honoring “all levels at-stake”



# Dialogic Design Science

**4 Axioms**

**6 Consensus Building Methods**

**7 Language Geometry Patterns**

**4 Stages of Interactive Inquiry**

**7 Laws of Dialogue**

# Four Axioms

**COMPLEXITY:** We live in a world that is very complex. Most observers are confused. Social systems design issues are strongly interconnected (Warfield).

**PARSIMONY:** Human cognition & attention is limited. Human beings are usually overloaded in group design meetings leading to bad designs (Simon).

**SALIENCY:** The field of options in designing social systems is multidimensional. Salient synthesis is difficult (Boulding).

**ENGAGEMENT:** Disregarding the participation of the stakeholders in designing social systems is unethical, and the designs are bound to fail (Ozbekhan).

# 6 Consensus Methods

- 1) **Nominal Group Technique (Idea Generation)**
- 2) **Interpretive Structural Modeling (Idea Structuring)**
- 3) **DELPHI (Iterative Consensus Building)**
- 4) **Options Field (Organizing Ideas in Categories)**
- 5) **Options Profile (Scenario Building)**
- 6) **Trade-off Analysis (Comparing Design Alternatives)**

# 7 Language Patterns

- 1) **Elemental Observation** (A one-line statement)
- 2) *Problematique* (A mess)
- 3) **Influence Tree** (A Root Cause Map)
- 4) **Options Field** (Clusters of similar ideas)
- 5) **Options Profile** (A design alternative)
- 6) **Superposition Pattern** (Impact of design solutions on *Problematique*)
- 7) **Action Plan Pattern** (Time-line of preferred alternative)

See *Steps* of process ...

# 4 Stages of Interactive Inquiry

- 1) **Definition or Anticipation**
- 2) **Design of Alternatives**
- 3) **Decision**
- 4) **Action Planning**

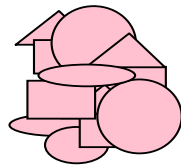


# GEOMETRY OF LANGUAGE PATTERNS

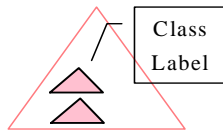
## Methodology of the Science

### Steps in each Stage of Inquiry

(a)  
Complex  
Situation



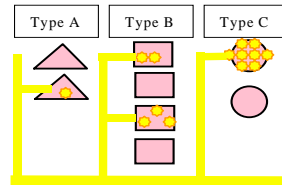
(f)  
Develop  
Shared  
Language



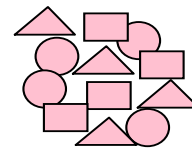
(b)  
Frame and  
Focus on a  
Triggering  
Question



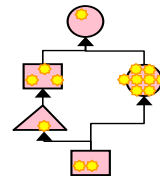
(g)  
Vote &  
Rank



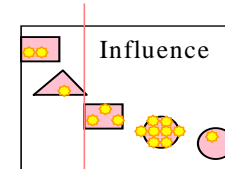
(c)  
Articulate  
Observations



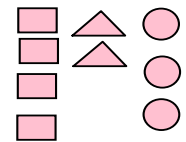
(h)  
Structure  
Abductively



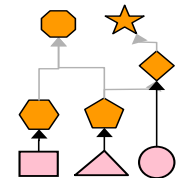
(i)  
Interpret  
Learning



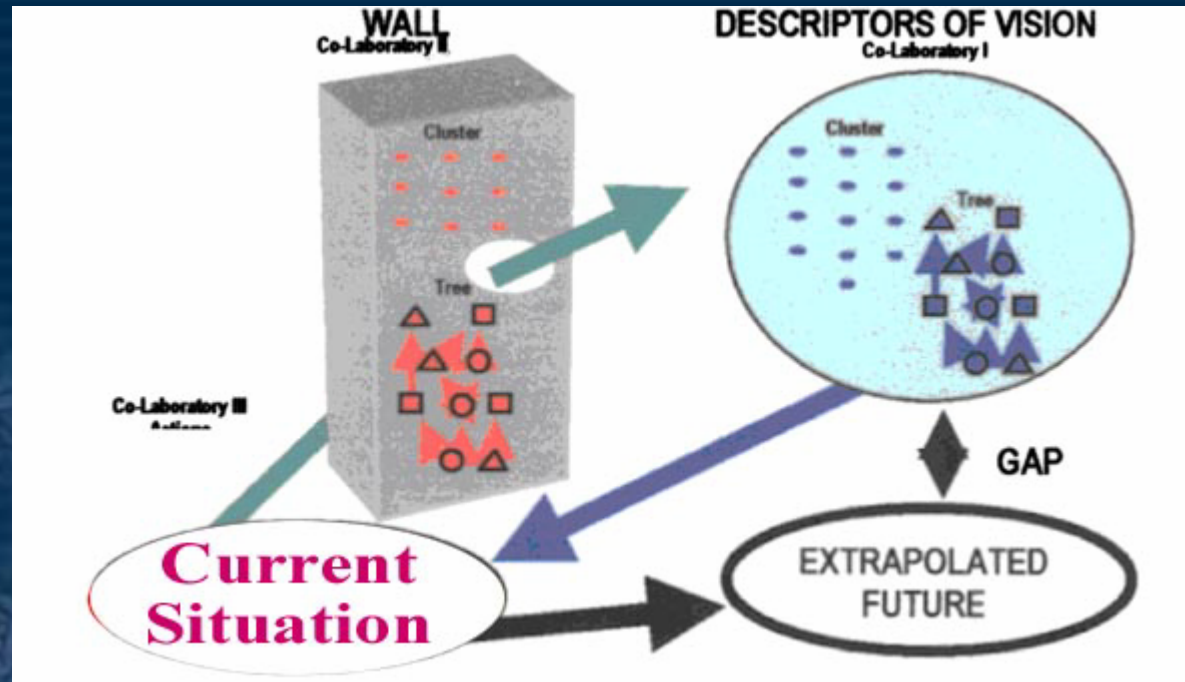
(e)  
Cluster  
Inductively



(j)  
Evaluate  
Cross-Impact



# Cyprus Civil Society Dialogue: Design and Development Framework



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# PEACE REVIVAL PROCESS

**2 co-laboratories:** Diagnosing the obstacles and drawing an action plan on how to bring the two communities closer.

**Facilitator training 1**

**Facilitator training 2**

# Cyprus Civil Society Dialogue: Facilitation Team Cohorts:

**Economic Integration: Yiouli Takis, Mustafa Damdelen, Derya Beyatli, Tatjana Taraszow, Andros Karayiannis, Ilke Dagli**

**Media: Elia Petridou, Tonia Loizidou, Yiannis Laouris, Derya Beyatli, Mustafa Damdelen, Marina Christofides**

**Environment: Marios Michaelidis, Munir Altuner, Mustafa Anlar, Polis Aniftos, Ilke Dagli and Tatjana Taraszow**



# PLATRES CO-LABORATORY



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# PLATRES CO-LABORATORY



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# Themes of Cyprus Co-Laboratories

- **Co-Laboratory on the Media**
- **Co-Laboratory on Political Parties**
- **Co-laboratory on Environment**
- **Co-Laboratory on Economic Integration**
- **Co-Laboratory on Strengthening NGOs/CSOs**
- **Co-Laboratory on 1960 Rights**

# Economic Integration Co-Laboratory: Triggering questions

**Idealization:** With the aim of economic integration, what are the benefits (opportunities) for Cyprus, of free movement of goods and services within Cyprus and the EU?

**Problematique:** With the aim of economic integration; what are the obstacles in achieving free movement of goods and services within Cyprus and the EU?

**Action Plan:** 'With the aim of economic integration, what actions should be undertaken to overcome the obstacles in achieving free movement of goods and services?'

# 7 Dialogue Laws

- (1) **Requisite Variety (Ashby)**
- (2) **Requisite Parsimony (Miller, Warfield)**
- (3) **Requisite Saliency (Boulding)**
- (4) **Requisite Meaning & Wisdom (Peirce)**
- (5) **Requisite Authenticity & Autonomy (Tsivacou)**
- (6) **Requisite Evolutionary Learning (Dye)**
- (7) **Requisite Action (Laouris)**



# Influence Map (Tree of Action)

Forty-two questions without the algorithm

Level I

7) ACTION

Level II

4) MEANING AND WISDOM

Level III

3) SALIENCY

Level IV

1) VARIETY

Level V

6) EVOLUTIONARY LEARNING

Level VI

5) AUTHENTICITY AND AUTONOMY

Level VII

2) PARSIMONY

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# How do we conduct Structured Design Dialogue ?

## 1. **DISCOVERY:**

Define scope of inquiry, scope of participation (What are we going to talk about and why?)

## 2. *Divergent Dialogue (Open ended):*

Selection of Triggering Questions

Open-ended responses (NGT method)

Clarification of observations/factors (Very critical for understanding)

## 3. *Convergent Dialogue (Strategic):*

Affinity clustering of responses for categories (Fields) and influence voting for Root Cause Maps (ISM method)

## How do we conduct Structured Dialogue?

### *Influence Voting Question:* (ISM method)

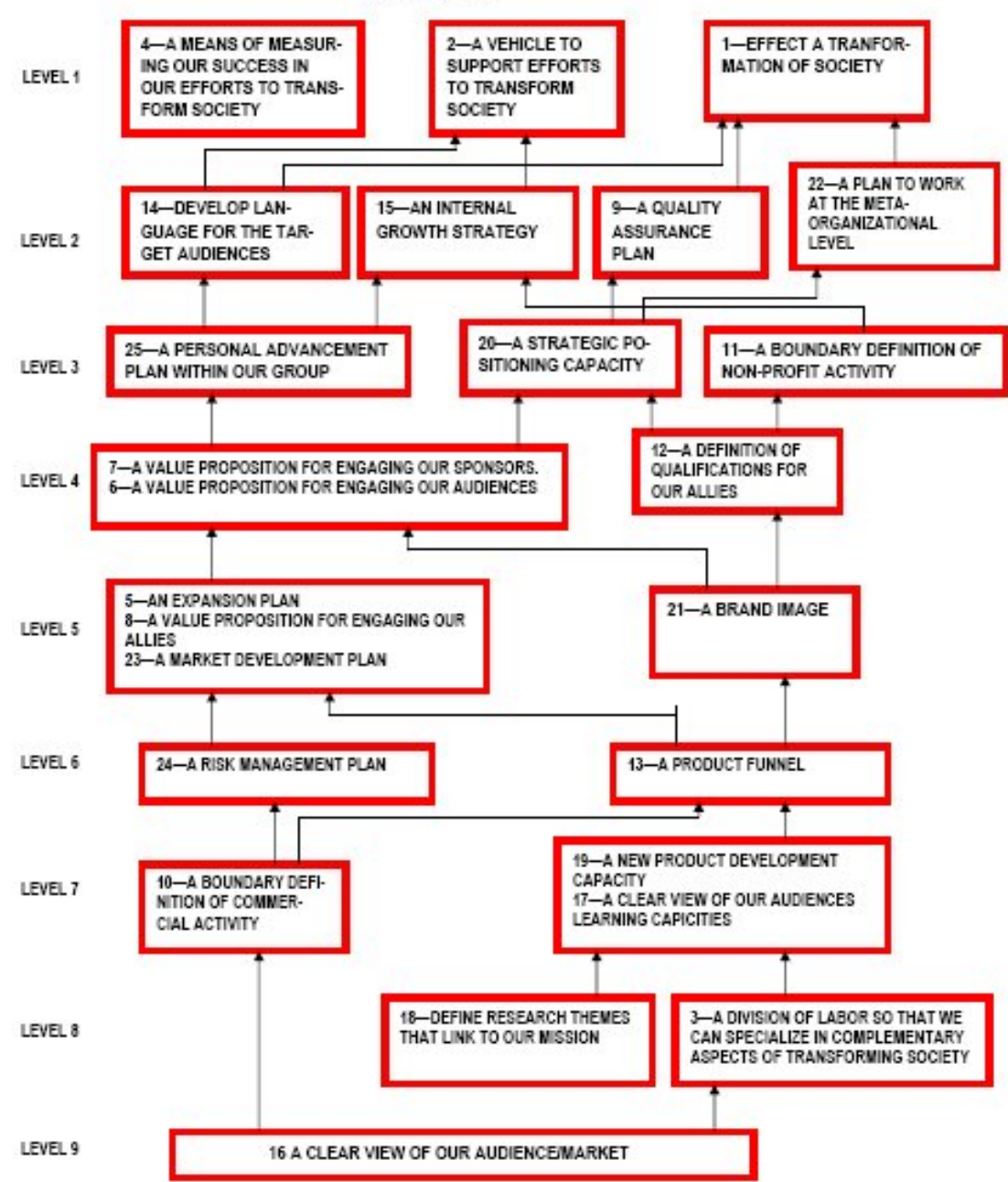
- “Suppose we were able to make progress in addressing Factor X,
- Will this **SIGNIFICANTLY** enhance our capacity to address Factor Y?”
- Comparisons selected by ISM algorithm, Builds a *directional* mapping of observations very efficiently (gains of up to a factor of 10).

# Example of Influence Map of Business Planning

- 9 levels deep!
- Planning track & Product Track
- 3 Cycles



TRIGGERING QUESTION: What are the Essential Assumptions behind a successful business plan for Work in Dialogue



# Erroneous Priorities Effect And Authentic Community Engagement

- Whenever stakeholder observations are *interdependent*, assigning priorities by aggregating individual “importance votes” leads to erroneous priorities & ineffective actions.
- Effective priorities emerge after evolutionary inquiry of the interdependencies among the observations through a dialogue focusing on “influence voting.”
- The capacity of a community of stakeholders to implement an action plan effectively is strongly dependent on the authentic engagement of the community in designing it (Laouris Law of Requisite Action).

# References & Sites

## Working in Dialogue websites:

The Blogora: <http://blogora.net>

- Dialogue community support wiki

Book website: <http://Harnessingcollectivewisdom.com>

Institute for 21<sup>st</sup> Century Agoras: <http://www.globalagoras.org/>

## Some current projects:

**Revitalizing the Peace Process in Cyprus**

**INCOSE Conference:** *Dialogic design for organizational ontology*

**Michigan UDL research and implementation:** *Universal Design for Learning*

**USDA Invasive Species Planning:** *Three Co-Laboratories of Democracy*

**U of Toronto:** *Laboratory for Collaborative Diagnosis*



# SDDP Approaches

***Co-laboratory*** : Facilitated, synchronous, collocated

- Facilitated by onsite team for necessity of F2F meetings
- *Cogniscope II* software (from 35 years of practice of CWA)
- Applications for diverse stakeholder, power differences, complex issues requiring relationship & trust building

***Webscope*** : Moderated, mixed-synch, distributed

- Distributed presence & timing of group interaction
- Facilitated SDD software, Web conferencing, Wiki site
- Effective for groups with shared context (project teams)

# Purposes & Uses of Structured Dialogic Design (SDD)

- Resolve issues among diverse stakeholders
- Democratic large-group decision making
- Policy design & decision making
- Complex (wicked) problem solving
- Strategic planning & effective priority setting
- Problem identification & root cause analysis