CHAPTER ELEVEN

Overview of the Methodology

I start by presenting a generic description of the SDP dialogue methodology. Each specific application in the arena of practice requires an appropriate modification of the generic methodology in order to satisfy the requirements of the particular situation, such as number of participants, number of workshop days, desirable outcomes from the co-laboratory work, resources allocated to the project, and the like.

The duration of the projects implemented over the last fifteen years with CWA Ltd. (www.CWALtd.com) clients varied from a two-week to a six-month period, depending on the complexity of the situation. The number of stakeholders participating in the co-laboratories ranged from 10 to 200 participants. The number of workshop-days per co-laboratory ranged from two days to six days. The six-day co-laboratories were implemented by engaging the stakeholders in three two-day workshops conducted within a period of approximately six weeks.

An SDP project is launched with the implementation of the Discovery phase during which the inquiry design team gathers intelligence through a review of extant literature and interviews with a representative sample of stakeholders. Usually ten to twelve interviews are held with different representatives of the community of stakeholders. Experience shows that after the completion of the tenth interview the knowledge generation about the situation from the interviewees becomes repetitive. This knowledge base is documented and distributed to the participants prior to the workshop as a White Paper (See Appendix D for an example of a White Paper).

Also during the Discovery phase the inquiry design team frames the triggering question(s) in collaboration with a representative(s) from the sponsor. When the triggering question has been agreed upon, the identification of representatives of the

community of stakeholders to participate in the co-laboratory is initiated. The three key criteria for identifying the representatives of the community are: (a) Variety of perspectives about the design situation, (b) Content knowledge and sensitivity in the context of the triggering question framed for the situation, and (c) Capacity to make a commitment to contribute to the implementation of the Collaborative Action Plan (CAP).

During the Definition stage of the Designing phase of Table 4-1, the participants are asked to define/anticipate the situation by addressing the question **"What should we do?"** In response to this question they generate a set of observations relevant to the situation. The observations are recorded and displayed in real time on the screen of the Collaborative facility. The authors of the observations are asked to clarify their statements through focused and open dialogue. During the Definition stage, the group inductively explores similarities among the observations and constructs affinity clusters, and abductively discerns the most influential observations by producing and interpreting an influence tree-pattern among important observations.

The second stage of interactive inquiry in the Designing phase focuses on the Design of Alternatives. The participants are asked the question **"How can we do what we should do?"** They propose and clarify action options for addressing the roots of the influence tree-pattern displayed on one of the walls of the Collaborative facility. Participants again construct affinity clusters by exploring the relationship of similarity among pairs of action options, and proceed to select those options that are the most salient to them for the third stage of the process, which is Decision. The most salient options are superimposed onto the influence tree-pattern, thus demonstrating the potential leverage of actions on ameliorating the situation.

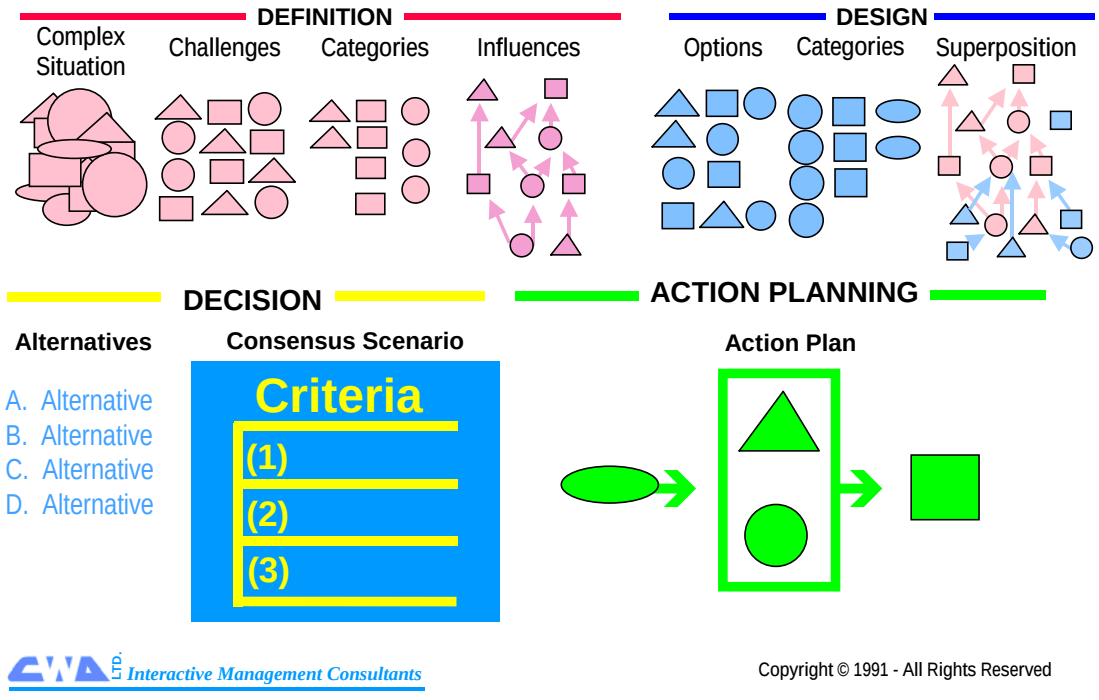
In the third stage of the inquiry, participants decide on an action scenario by designing alternative scenarios that focus on the question **"Which are the preferred options and Why?"** They usually work in small teams to identify and select the most salient options within and across each of the affinity clusters produced in the second stage of inquiry. The small teams present in a plenary session their action scenarios and the

rationale for their selections. After all team scenarios have been presented and discussed at the plenary session, the facilitation team helps the participants to converge on a consensus action scenario. The facilitation team ensures that the Law of *Requisite Saliency* is not violated during the decision process.

In the fourth stage of the inquiry, i.e., Action Planning, the participants are engaged in answering the question **"When will we do what we can do and who will do it?"** thus completing the design of the Collaborative Action Plan.

The generic description of the four stages of inquiry (Module E) conducted during a co-laboratory is schematically depicted in the following three figures. Figure 11-1 summarizes graphically the four stages of inquiry.

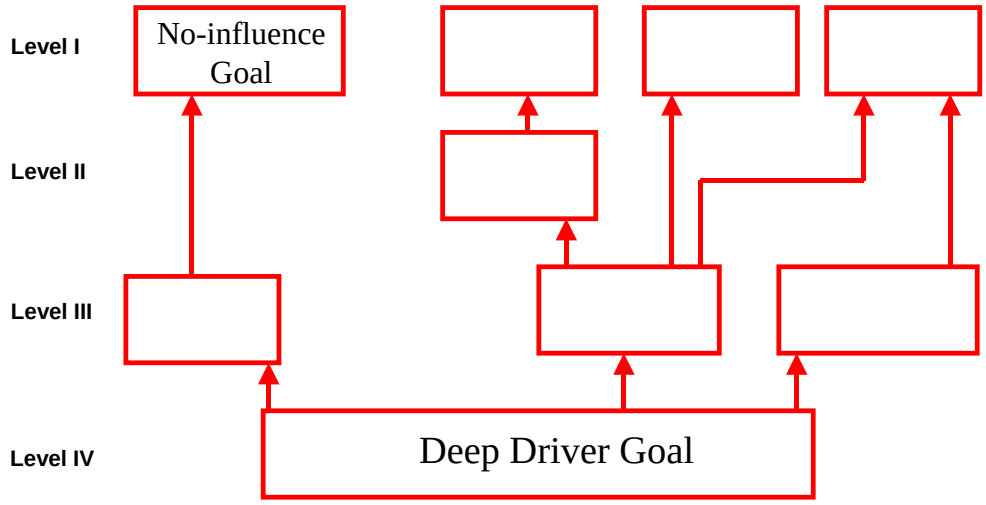
Figure 11-1: Generic Inquiry Stages of the *CogniScope*™ Dialogue



DEFINITION

The **Definition/Anticipation** stage begins with a complex, messy situation, depicted graphically in Figure 11-1 by overlapping geometric shapes representing the variety of perspectives among the stakeholders, all of which are strongly interacting to produce the *Problematique* of the situation. For example, in employing SDP to a strategic management situation for the US Forest Service the team of twenty-five participants was asked to respond to the triggering question: "What are short-term Annual Performance Goals based on a draft annual performance plan derived from the Strategic Plan (2000 Revision)?" Employing SDP dialogue, the strategic planning team efficiently generated and clarified the meaning of the proposed goals, prioritizing them by voting on relative importance, and finally assigning them to affinity categories of similar goals on the first day of group work. On the following day the team constructed a tree of influence showing the interrelationships among the Goals by means of series of votes of influences among the Goals, two-at-a-time. These three process steps are shown graphically in Figure 11-1 on the left side under the title of **Definition.** The influence tree produced through structured dialogue focusing on the influences among the goals enabled the participants to discover the "deep rooted" goals, i.e., those goals which, if addressed, would exert strong leverage in addressing other goals, as shown schematically in Figure 11-2. In this schematic, these deep-rooted goals of the influence tree are located at Level IV, with arrows propagating upward to less influential goals located at Level I.

Figure 11-2: A Schematic of a Leverage Map of the Influence Structure of Goals



The example shown above is an INFLUENCE structure.
demonstrates the direction of influence.

Figure 11-2 illustrates what an influence tree of goals dealing with a complex strategic management situation might look like after the participants have had the opportunity to engage in SDP dialogue. Supported by the computer groupware, the participants are engaged in discovering relationships among goals, efficiently producing influence and affinity patterns among goals (i.e., graphic patterns as shown in Figure 11-2). They can amend the statements of goals and relational patterns continuously and automatically, with maximum flexibility and adaptability of thought and structure.

DESIGN

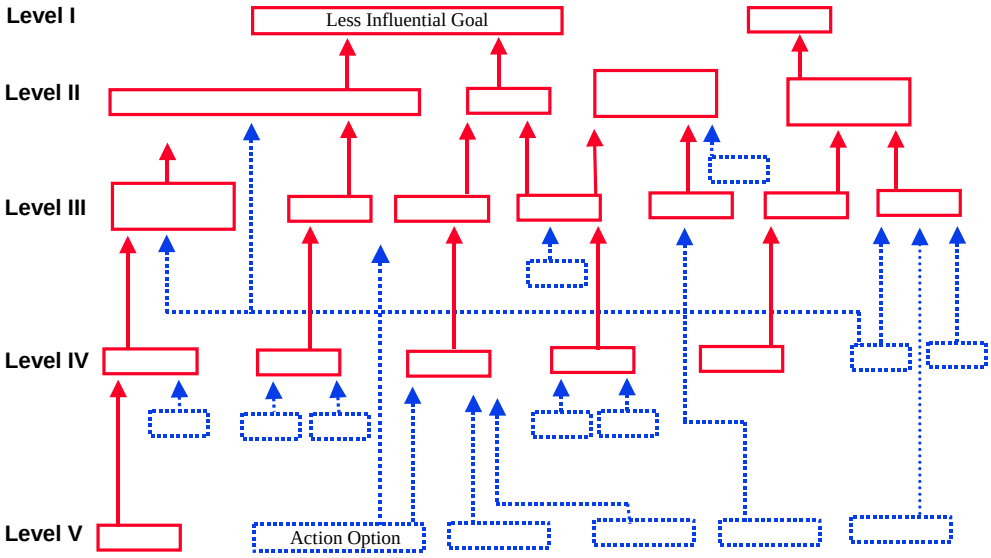
In a generic application of SDP dialogue the **Definition stage** is followed by the **Design of Alternatives stage,** i.e., the identification of options that, if implemented, would meet the deep-rooted goals and contribute to achieving the system of goals exhibited in Figure 11-2. The options proposed by the participants are clarified, prioritized and assigned to similarity categories as shown schematically in Figure 11-1 under the title of DESIGN.

Figure 11-3 displays another product of the generic methodology, namely the identification of those options that, if implemented, would address the deep-rooted goals. Identifying those **options** (or actions) that, according to the majority of stakeholders participating in the dialogue, have the strongest leverage in terms of the system of goals is another benefit of the methodology. Figure 11-3 is a schematic of the Superposition Pattern mentioned in Chapter Five.

DECISION

Referring again to Figure 11-1, the third stage of SDP dialogue provides the participants with an integrated, systemic model of evaluating alternatives in the context of a set of criteria, and converging on the preferred alternative during the **Decision Stage**. In some applications of SDP dialogue the rigorous trade-off Consensus Method is employed for evaluating alternative designs (see Appendix B for details on the trade-off method). Indeed, all things considered, this is precisely where such a collaborative design forum of stakeholders ought to converge when dealing with the implementation of collaboratively designed action plans in the context of the challenges of the Information Age.

Figure 11-3: Actions With High Leverage Become Apparent



Illustrating Superposition of Action Options (blue) and Goals (red)

ACTION PLANNING

Action Planning is done according to standard management practices. Stakeholders accept responsibilities; lines of communication are established; schedules are set etc., often using Gantt charts. Action Planning is sometimes done after the face-to-face meeting is over if there are time restraints.

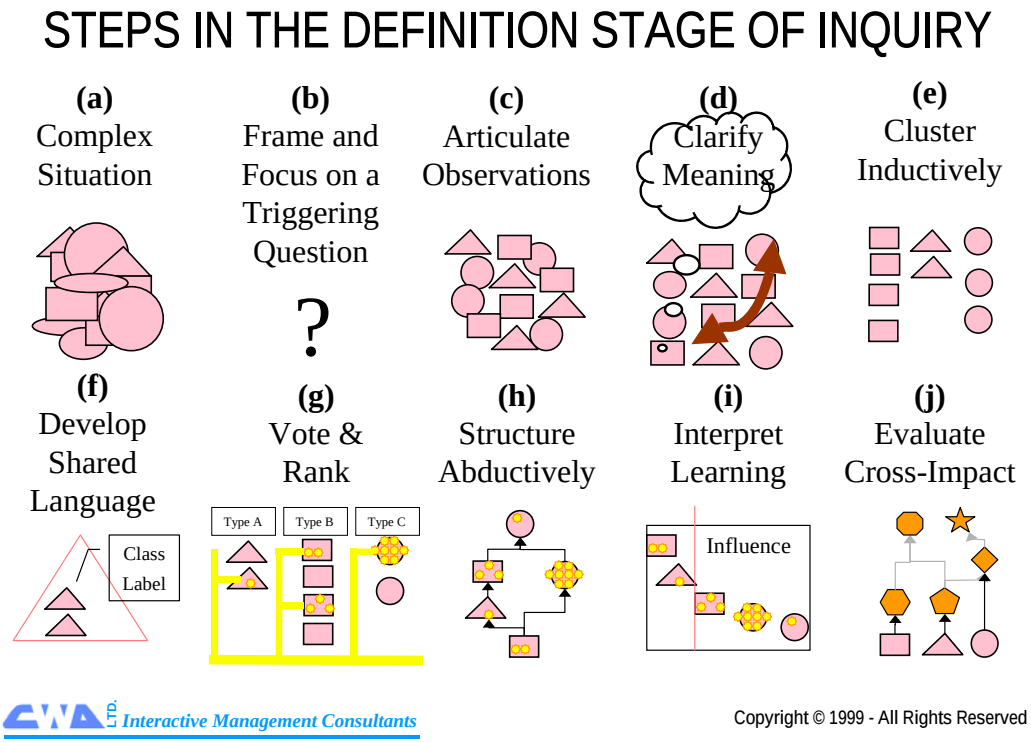
DETAILS FOR THE DEFINITION STAGE OF INQUIRY

The details for the Definition stage of inquiry are schematically depicted in Figure 11-4. As stated above, the inquiry begins with a complex, messy *Problematique* situation, as depicted graphically by overlapping geometric shapes (Figure 11-4(a)) representing the variety of perspectives among the observers. A review of eighty-one applications, completed during the decade of the 1980s, found that for the Definition stage the average number of observation generated by groups of approximately twelve

participants, independent of the composition of the group and of the subject matter being addressed, is equal to sixty-four.

A detailed elaboration of the SDP dialogue steps of inquiry as depicted in Figure 11-4 is offered below:

Figure 11-4: The Linguistic Graphic Patterns of the Definition Stage



Step (a) is the geometric representation of the *Problematique* that structured dialogue is asked to address. It consists of many interrelated institutions, cultures, economic, political and social factors, etc. During the Discovery phase the inquiry design team investigates this "mess" with the intent to prepare a White Paper, and to frame the triggering question.

In step (b), the triggering question defines the context of the dialogue. A typical triggering question might read:

"What are critical current and anticipated issues to be addressed in order to achieve our strategic vision?"

In response to this question, the participants articulate their ideas in their own words to the full attention of the other participants, step (c). Their words are posted on a wall of the Collaborative facility and everyone agrees not to alter them. In a second round robin, step (d), the authors of the statements are given the opportunity to respond to questions by other participants in order to explain the meaning and intent of the their observations. This approach authenticates each person irrespective of his or her education level or position of power. It produces a palpable reduction of tension. People seem surprised as they are being heard, perhaps for the first time, in important designing matters affecting their lives.

In step (e), the participants collaborate to inductively cluster the observations they have made. Then in step (f), they agree upon labels for the clusters they have created. These steps enhance the understanding of the meaning of the observations and build a consensual language and a sense of shared competence within the group. The Law of *Requisite Meaning* is implemented during this step.

In step (g), participants rank the ideas presented in the affinity clusters according to individual and subjective relative saliency. This step brings into sharp relief the different priorities and values within the group. In the ensuing discussion, stakeholders come to understand where their co-participants are coming from, which leads to a respectful working relationship based on defined mutual interest. The Law of *Requisite Saliency* is implemented in this step.

In step (h), participants explore influence relationships among the observations and construct abductively a tree of influence. Charles Peirce is credited with the invention of abductive reasoning, which is a combination of inductive and deductive thinking. It is the type or reasoning that contributes to the construction of hypotheses. In this step, they relate their observations in paired judgments asking whether observation A

really influences observation B, and vice-versa. The Law of *Requisite Meaning* and the Law of *Requisite Parsimony* are implemented in this step.

In steps (i) and (j), the stakeholder/designers examine the "tree of meaning" they have constructed in step (h). As a group, they analyze and interpret the cross-impacts existing among the observations they have made. If there is a need to amend the preliminary pattern of influences after the interpretation, they can do this efficiently again with computer assistance, and produce a new version of the tree-pattern. In many cases participants volunteer to share their interpretations of the tree of meaning in the context of their experience, thus contributing to the richness of the dialogue.

In this manner, step-by-step, SDP dialogue progressively clarifies the situation and opens the way to greatly enhanced decision-making and action planning. In addition it:

- Authenticates every stakeholder/participant;
- Elicits ideas and points of view from all stakeholders;
- Moves toward effective and meaningful consensus;
- Elicits and deals with the different priorities of stakeholder/participants;
- Equalizes power relations among the stakeholders; and
- Goes beyond identifying factors that are important, to specifying those that are most influential in addressing the social system-designing situation.

Figure 11-5 displays some pictures from a recent application of the SDP with a group of stakeholders representing parents, teachers, students, administrators, and consultants from a middle school in Michigan. These stakeholders focused their dialogue on the issue of improving the performance of students with disabilities in terms of the Average Yearly Progress (AYP) in mathematics. AYP is a measure of accountability based on the No Child Left Behind Legislation (NCLB) passed by the US Congress in 2002. This team of twenty-five representative of the community of stakeholders allocated five days of dedicated group work and converged on a Collaborative Action Plan that includes twelve effective priorities to be implemented by task forces in the next

two years (Belay, et al., 2005). The twelve priority actions were selected from an original set of more than fifty proposed by the workshop participants. The pictures of Figure 11-5 are indicative of how the stakeholders, through the SDP approach of learning by iteration and by graphic representations, were able to converge to the high priority actions for implementation.

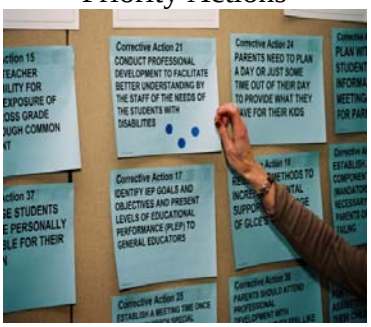
Figure 11-5: Illustrating the SDP Design of a Collaborative Action Plan

(Photos courtesy of David Smith of the Michigan Department of Education)

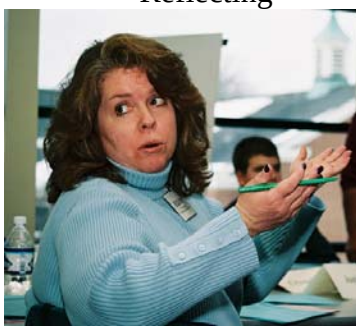
Listening

Discussing

Groups Vote on Priority Actions



Reflecting



Storytelling