

The Four Phases of Research

The world today asks that problems be solved not only in the most expedient or profitable way, but also in a way that the human beings involved in the work can grow and develop along with the wellbeing of the activity itself. To focus on the appropriateness of the process for those involved not only enhances productivity but develops a deep loyalty and concern among those who are working together. In the distant past the roots of the original trade guilds were built on such concerns for the process. In those times, process oriented thinking was known as alchemy, a study of how processes which fostered the creative activities in Nature could be used to model human interaction in groups and guilds. People who wish to work on processes today can learn much from the language of alchemists. Images taken from Nature can be refined and then employed meditatively as analogues for problem solving, whether personally or in groups.

The following questions can be used to define and implement the stages of alchemical problem solving.

Physical thinking: The fundamental stage in problem solving. Facts and data are gathered with the question—what is different? This stage the alchemists would characterize in terms of Earth.

Living thinking: The facts are arranged into sequences of typical movement or flow patterns with the question—what is changing? This stage the alchemists would characterize in terms of Water.

Feeling thinking: The patterns are considered from the point of view as to how they are likely to evolve to an extreme of where they are today. The ultimate question at this stage being—what is reversing? This stage the alchemists would characterize in terms of Air.

Creative thinking: The rhythm of the problem solving process is considered from the point of view of what the problem is likely to look like in many years with the question—what is the whole? This stage, in which the original material of research is completely transformed and born anew, would be characterized in terms of Fire.

These four stages are an archetypal pattern underlying most interactions between humans as well as most patterns of change in the Natural world. When undertaking research, it is crucial to recognize these four phases and to trust that they do lead to fresh insights. All too easily, research never gets past a “membrane” distinguishing the second from the third phase. At this critical boundary, the researcher may experience a loss of direction and clarity: the data appear to “reverse”; the initial hypothesis comes unglued, one begins to feel that one is losing one’s way. This is the first moment of “Air.” The risk at this juncture is to revert to the gathering of new data—that is, to circle back to the initial phase of “Earth” rather than simply to trust the chaos and confusion that has arisen and just “hang in there” with a feeling of suspended disbelief.

Practice in recognizing and implementing knowledge about these patterns is an invaluable aid to group process and personal growth. These questions can be arranged in the form of a mandala which is useful when undertaking work on the self or attempting to establish a group awareness of the assets and liabilities of the group with regard to process.

We are most grateful to Dennis Klocek for his articulation of the four phases of research outlined above.