NaCuHeal Information Design in Public Health

Synthetic research models of the Nature-Culture-Health Interplay

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Five decades ago the great hygiene researcher Werner Kollath observed that the practice of medicine would need to be adjusted to the changed circumstances (1). While modern medicine was largely shaped through successes in healing infectious diseases, it is the lifestyle-caused diseases that now reclaim attention. It is clear that the combat against lifestyle-caused diseases will require completely new approaches to healthcare. The Nature-Culture-Health interplay (NaCuHeal) promises to add to modern healthcare elements which are neglected and needed (2,3). The aim of the NaCuHeal project was to create a common arena and forum for wholeness thinking and creativity, in order to improve environment, quality of life and health among people (4,5).

The multifaceted interplay between nature, culture and health is an area where reliable information is needed. The purpose of the NaCuHeal Information Design project is to develop a foundation for creating such information, based on information design principles.

Information design complements and supplements the conventional or traditional informing in a similar way in which NaCuHeal complements and supplements the conventional medicine. Information is designed to suit the needs of modern people, society and culture. Methods are developed by which suitable information can be created (6).

Information design can contribute to the NaCuHeal research and practice in at least two ways:

- By providing methods for establishing or founding results;

- By developing suitable communication.

Polyscopic Modeling methodology has been developed at the University of Oslo as a prototype implementation of the information design approach (7-9).

As a written convention, the methodology provides a rational foundation for developing new ways of creating and using information. In particular, the methodology allows for stating and proving results in non-standard research areas.

The key point in Polyscopic Modeling is conscious creation and use of the way of looking or *scope*. Instead of automatically relying on our habitual ways of looking at a phenomenon or issue, we consciously create new angles of looking in order to see and understand more. The ultimate goal is the so-called *perspective*: A solid understanding of an issue or phenomenon as a whole, with clear idea of the main factors and their relative importance.

A key technique for scope design is postulation. Concepts are defined by convention. An example is the definition of *culture* as cultivation of well-being. In this text, the defined words are italicized.

To help create and maintain the perspective, Polyscopic Modeling emphasizes that the *scopes* should be coherent (representing a single level of detail and angle of looking). Multiple scopes are needed. *High-level scopes* and *high-level information* are distinguished from the *low-level* ones. Like the view from the top of a mountain, *the high-level information* gives us an overview of the phenomenon or issue as a whole, exactly what is most needed for the perspective. Visual techniques such as ideograms play a key role [10,11].
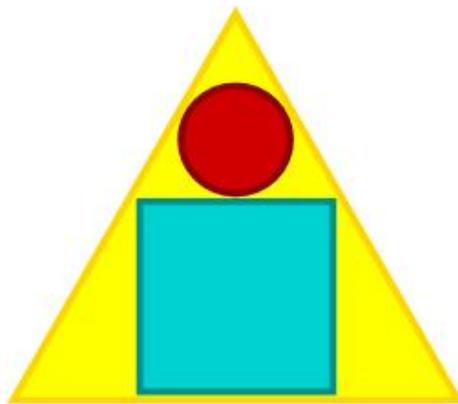

Figure 1: Polyscopic Information ideogram

The Polyscopic Information ideogram (Figure 1) illustrates the information which is the objective of the Polyscopic Modeling methodology. The triangle in the ideogram may be thought of as representing a mountain, on which every point is a scope or viewpoint. Polyscopic information (represented by the "i" inscribed in the triangle) consists of two parts: The high-level information (represented by the circle) and the low-level information (represented by the square). The high-level information provides the large picture or the claim of a result. The low-level information provides the supporting details or the foundation or justification for the result.

The Polyscopic Modeling methodology provides specific criteria and methods for creating polyscopic information.

The NaCuHeal information design project will apply Polyscopic Modeling to creation and communication of information which is required for NaCuHeal.

We will begin by mapping the main lines of co-dependence between nature, culture and health, and by finding the sources (low-level information) which will allow us to understand the most relevant interactions and establish the most relevant results.

A sketch of what results from applying Polyscopic Modeling to create a 'top of the mountain' picture of NaCuHeal and its role and situation might be as shown in Figure 2.

NaCuHeal in a larger cultural *perspective*

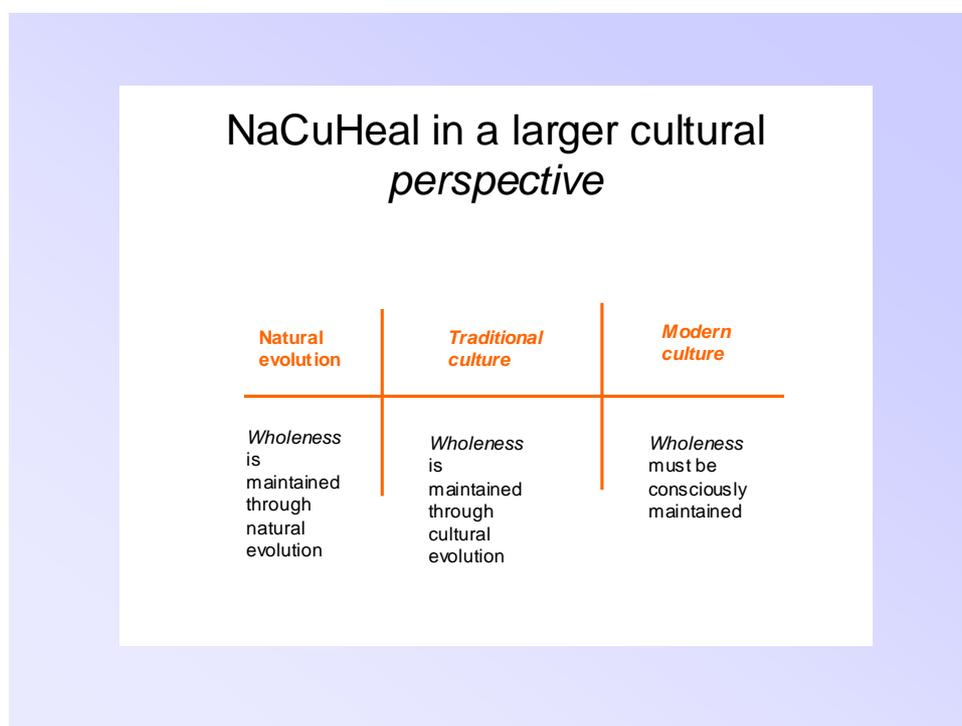| Natural evolution	Traditional culture	Modern culture
Wholeness is maintained through natural evolution	*Wholeness* is maintained through cultural evolution	*Wholeness* must be consciously maintained

Figure 2: NaCuHeal in a broader cultural perspective

Wholeness is the quality shared by a whole mechanism, organism or ecosystem. Things must be whole in order to be well and function well. There are in principle two ways how something whole can originate: evolution or creation.

We may define the traditional culture as the culture which can evolve spontaneously. Indeed, the traditional cultures were able to develop their lifestyle, arts, values, religion etc. through centuries of gradual improvement, trial and error and adjustment. We, however, are no longer living in a traditional culture (12). Our culture is changing too fast to be able to evolve spontaneously. Therefore the wholeness of the culture, the nature and the human health, environment and quality of life must be consciously secured.

During the natural evolution the basic choices were directed by feelings and instincts. In the traditional culture, the basic choices were prescribed by the tradition. In the modern culture neither the feelings nor the traditional prescriptions can be relied on. We have both the opportunity and the responsibility to make our choices consciously. More and more, modern people make their choices by reflecting about issues and becoming conscious of their consequences. The sociologists have called this new condition 'reflexive modernization'(12).

Conscious choice and reflexive modernization depend upon the availability of suitable information (8). As scientific information, this information must be reliable. Reliability, however, is not sufficient. Information must also address directly the immediate needs of the people and culture. Furthermore, information must be accessible to nonprofessionals.
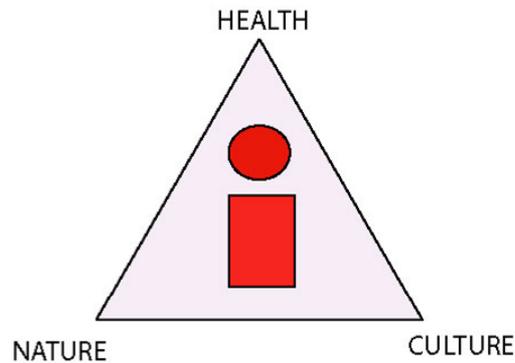
Figure 3: NaCuHeal Information Design ideogram

The purpose of the NaCuHeal information design project is to provide a framework within which such information can be developed. The mission of the project is to develop a suitable information base about nature, culture and health and their various co-dependencies (Figure 3).
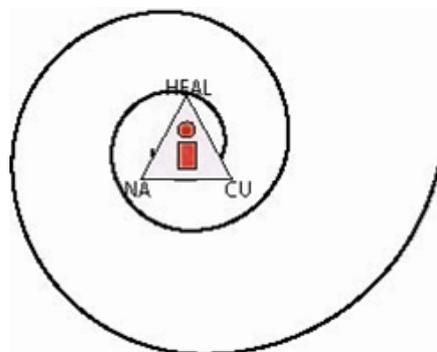

Figure 4: NaCuHeal Information Design strategy

Our strategy is to first establishing a nucleus of solid research practice, and continue by including other researchers and spinning off projects (Figure 4). The information developed by our project will synergize with the existing activities of Nature-Culture-Health. By combining research and community participation, we want to create a broader basis for health promotion, prevention and rehabilitation (13).

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