

SYMMETRY AND EXPERIENTIAL PARADOXICAL WHOLENESS

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Concepts of symmetry evoke both formal and experiential associations which are deeply connected to epistemology. The corresponding connections of the two associations seem to be "symmetrical". On one hand, in the case of mathematical and physical symmetries for example, epistemological principles lurk behind the definitions and the demonstrations or proofs of symmetries. On the other hand, "symmetry" can be the direct sensation of knowing: symmetry being knowing. One may intuit, for example, a wholeness as a "symmetrical" gestalt in which distinguished poles suddenly merge or collapse to a unitary identity.

This talk outlines relations across these associations. Symmetry is approached within a class of problems treating compared distinctions. The form of these problems is followed across a range of related topics, from annihilation to wholeness and epistemology. The talk draws from my paper "The Breadth of Symmetry" in the conference book Symmetry in a Kaleidoscope. This oral presentation will concentrate on describing experiential and epistemological aspects of the associations and modelling them within the structure developed in the written paper.

The initial starting point is a game played with a simple system which consists of a dissymmetric pair of binary spaces marked by distinctions (e.g. left/right on/off etc.). The game derives from a consideration of a calculus of distinctions (Brown, 1979). It involves considering what happens when the two terms of a distinguished pair are moved across the distinction using various possible "crossing rules".

Examples of crossing rules are superposition, transposing mirror image, etc. The basic question is, for an "observer" who is in one of the spaces, what are the possible results of this transformation? The scheme considered, and the results entering our discussion are summarized in the table (on the second page of this abstract). For example, as listed in the table, annihilation is the result of the game played so as to be consistent with the formal logic of distinctions.

Important to this presentation, illusion and paradox can be cast in the form of the game and bring epistemology to a central position. That is, they force the observer to examine the interaction of his process for determining valid knowledge with the identification of the thing known. Different answers reached in this examination indicate that tests for "reality" epistemologically establish "biased" realities.

TABLE

Nature of Distinction*	Crossing Rule	Effect
I. <u>existential</u>:		
exclusionary	superposition	annihilation
configurational	symmetry operation	transformational identity (symmetry)
identificational	interchange	identity (absolute)
II. <u>epistemological</u>:		
identificational	interchange	illusion
identificational	interchange	conditional paradox
identificational	interchange	self-referential paradox
III. <u>distinction generator</u>:		
	simultaneous	paradoxical wholeness

*The existential category denotes that the distinctions are seen as associated to objects, conditions themselves. The epistemological category denotes that the distinctions draw direct attention to methods of knowing.

For example, both measurement and perception can be argued to be processes for establishing knowledge, but they can yield different results. Historically, in classical physics, perceptual-space was distinguished from measure-space, and taken to be subjective or unreal, thus reducing paradox to illusion. Today, paradox re-arises as the problem of the object-measure, or object-epistemology wholeness.

Consideration of this epistemological role in "existential" or "self-referential" paradoxes suggests the concept of what I will call a "distinction generator" which generates the named distinctions (spaces) as well as the resolution of the parts of the paradox in the spaces themselves. The distinction operator appears inherently paradoxical and infolded.

From the phenomenological perspective, the generator appears as a self-contradictory beast if proposed as existential in a singular "real" space. However, it satisfies (is the solution to) the logic paradox of "A is not A", and it can be seen as a paradoxical wholeness and "seed state" which is conceptually complimentary to dissymmetrical distinction.

The structural character of resolving paradox at this level provides an interesting description of experiencing knowing (experiential epistemology). Examples used to illustrate this will be drawn from the perceptual dynamics involved in understanding equated concepts (Warren, 1986a) and from the experiential paradoxical collapse of dualisms descriptive of certain states reached in meditation. The experiential "wholeness" and "symmetries" claimed of mystical experience appear logically connected to the experience of formally symmetric states.

In the case of understanding equated concepts, a cognitive block may break and the equated terms make sense in a (sudden) dynamic convergence and interpenetration of the distinguished (but equivalent) concepts into a new configuration. The dynamic aspect of this experience has much of the quality of experience associated with visual perceptual forces such as discussed by Arnheim (1969).

Modelling the process of this collapse is offered by suggesting "awareness" is a self-reflected state consisting of a dissymmetric function with two terms (denoted "emate" and "icate") which paradoxically "interpenetrate" each other (Warren, 1986b). In normal perceptual cognitive levels these two terms are hinted at by such paired words as "intuitive" versus "rational" and "sensation" versus "structure", and "of" versus "in".

The root level of awareness, at the level of an "awaring" or distinction generator, may be perceptually approachable as an experiential "seed state" (Hayward, 1987). Such Vedic statements as "I am That" and the Buddhist Void appear consistent with this form.

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