

# Visions

The future is here -  
fantastic - yes -  
And we are  
integral with it -  
Martha Rogers  
10/31/93

*Infinite Potentials*

**The Journal of Rogerian Nursing Science**

# Visions: The Journal of Rogerian Nursing Science

Volume 2 Number 1 1994

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## CALL FOR MANUSCRIPTS

The Society of Rogerian Scholars, Inc., an international organization, publishes a refereed journal, *VISIONS: THE JOURNAL OF ROGERIAN NURSING SCIENCE*. Although the journal is currently published once a year, we plan to expand to twice a year as soon as possible. Manuscripts will be accepted for review at any time during the year. The deadline for the summer issue is October 1st. The deadline for the proposed second issue is April 1st.

### Guidelines:

1. Content must reflect some aspect of Rogers' Science of Unitary Human Beings (research, theoretical issues, etc.).
2. The manuscript must not be submitted elsewhere for consideration.
3. Manuscripts will not be returned.
4. Authors will follow the format of the *Publication Manual of the American Psychological Association* (4th. Ed.).
5. Once the manuscript has been accepted for publication, authors must submit a hard copy plus a copy prepared on a 3 1/2 inch disk in WordPerfect 5.1, prepared on an IBM or IBM compatible computer.
6. Upon final acceptance, an honorarium of \$50 will be sent to the author (or primary author if more than one).

### Organization of manuscripts:

1. Identification page (name, address, phone number, affiliation, and running title).
2. Title page (no author identification).
3. Abstract followed by 3-4 key words for indexing.
4. Text of 15-20 pages plus references.

Each manuscript will be reviewed by three members of the Review Panel. Final decision rests with the editors. Submit 4 copies of the manuscript to either editor:

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## EDITORIAL

### I Dreamed About Martha

Martha entered a room looking much the same as she had the past few years. She walked over to a desk and sat down; I sat next to her. Thinking that she might not be able to see me very well, I said, "It's Sheila, Martha." She said either, "Can you hear my heart?" or "Listen to my heart," and I awakened. What does it mean? Does it mean anything? It's always difficult to interpret dreams.

One of the things I've been thinking about (while awake) is the future of Rogerian nursing science without Martha. Will we go off in different directions depending on our own interests, or will Rogerian nursing science continue as it did in Martha's lifetime? Another related question is, how can we, as members of the Society of Rogerian Scholars, both preserve and enhance Rogerian nursing science?

Thinking about the above questions led to my interpretation of the dream. The important parts of the dream are the statements, "Can you hear my heart" and "Listen to my heart." For the past 30 years that I knew her, Martha's heart and passion were Rogerian nursing science. The heart or essence of Rogerian nursing science has remained the same over that same period of time. Of course, there have been refinements of concepts and changes in words and definitions, but the core remains the same.

It seems to me that the message is to not only "listen" to the heart of Rogerian nursing science, but to make sure we "hear" it. Sometimes we listen but do not hear, as we are too busy thinking our own thoughts or planning what we want to say when our turn comes again. As we work to advance the Science of Unitary Human Beings, let's be sure to listen and really hear the heart of Rogerian nursing science.

Sheila Cheema, RN;PhD

The key to advancing Rogerian nursing science is communication. Sharing our ideas, being willing to critically examine the ideas of others, and being willing to hear the ideas and critiques of colleagues is the only way we can further develop the Science of Unitary Human Beings. This journal is a marvelous vehicle for such communication. Write, write, write....and send us your manuscripts, your ideas for columns -- imagination, controversies, emerging scholars -- and your critiques and responses to the ideas presented in the journal by your colleagues.

In this issue, Linda Johnston presents another tool developed within Rogerian nursing science, the Human Field Image Tool. Dorothy Woods Smith and Violet Malinski share their ideas about developing a theory of spirituality. Barbara Phillips and Martha Bramlett share the development of the concept, "integrated awareness," which shares certain parallels with the discussions on spirituality. Read on, and as Martha would say, "Enjoy"!

Violet M. Malinski, RN;PhD

Cover: Thanks to Sarah Gueldner for sharing Martha's autograph on her copy of the premiere issue of *Visions* with all of us!

# WE ARE STILL IN THE PRESENCE OF GREATNESS

Sarah Hall Gueldner, RN;DSN;FAAN  
Immediate Past President, Society of Rogerian Scholars

March 13, 1994, will mark forever the day that Martha E. Rogers, RN; ScD;FAAN, was freed of her body to become truly integral with the universe and beyond. We human fields still more or less housed in our physical bodies know that she may have almost looked forward to that extraordinary pattern change, and we can easily envision her "surfing" (as she once said) about the cosmos, everywhere at once, finally knowing *all* the answers! She is ageless.

In fact, I'm sure that I have already seen her at play at her new pandimensional address. Because of a difficult to change schedule, I left Charleston, South Carolina, at 10:00 pm on the eve of her funeral, planning to drive through the night to arrive in Knoxville around 5:00 am. My route would take me through South Carolina, North Carolina, and then Tennessee. The corners of these three states come together in a section of the Smoky Mountains about 2 hours east of Knoxville, on I-40. Having already worked an especially full day before I left, and saddened that my friend and mentor had died, the trip seemed long. Naturally I spent a good bit of the time as I drove remembering times when I had been in the presence of Martha.

The memories that slipped through my mind were diverse in nature, ranging from casual times, like once when we accidentally sat down in a cactus bed to rest as we climbed up Kitty Hawk, to formal occasions when she had addressed an audience of hundreds. In fact, my first time seeing her was at the first National Nurse Theory Conference in New York City in the late 1970s. As was her custom, her crackly voice and spirited good humor stole the show. When she finished, the very large audience gave her a standing ovation.

I smiled, too, remembering just last summer when we travelled together to Spain for the Sigma Theta Tau International Research Congress and the International Council of Nurses. I was struck by the way even people from other countries recognized and were drawn to her. Many of them called her Martha.

And I thought of her at her mountain cottage last October in Pigeon Forge, Tennessee, only a few months before her death, when we auctioned off some of her personal belongings. The group was spirited, and she had a wonderful time autographing books and memorabilia, and watching would-be buyers outbid each other. In fact, that was the last time I saw her. I drove away from the cottage with 3 boxes of her books in my car; we had had such fun that we planned to have another auction in New York in June.

Then suddenly, as I drove through the night amid the beautiful sharp peaks of the mountains in the moonlight, I was jarred to attention by an amazing sight. From the far left of the horizon came a dazzling shooting star, arching across the sky and literally bursting into a blaze of light right ahead of me! The rest of the trip was short. I smiled, no longer tired. I feel sure that was Martha, scooting about the universe in her new

pandimensional form, just dropping by to let me know she was okay. She knew I was taken with shooting stars and sparklers, and that I would recognize her. That made her funeral more bearable to me.

But as I drove home from the funeral I began to reflect on how privileged I was to have known her, and the responsibility to pass on to others what I had learned from her weighed heavy. When I returned to my home I found that a colleague who had never met Martha had written a poem for me. It reminded me that we are still in the presence of her spirit, which was and is the essence of her greatness. As I read it over again several times, it seemed to speak to all of us who had the opportunity to grow under her direction. It helped me feel better, and I asked my colleague if I might share it with you.

### **To Sarah - The Night of Martha's Death**

My thoughts can never capture  
The grief and inner sorrow  
of this - your loss.  
To me, she was inspiring  
To you, she was a mentor  
of mind and heart.

And yet, I see within you  
The seed of Martha's vision,  
The ever new horizons  
In time and space and motion,  
And others in the circle,  
And you are not alone.

So as life's shifting pattern  
Blends "past" into "the future"  
I smile in recognition  
Of how she charged our thinking  
And how she's still among  
And never can be lost.

By: Carol Thompson Smith, RN;DSN  
Director of the Masters Program  
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# MARTHA E. ROGERS: AN ECLIPTIC EXPERIENCE

Martha Hains Bramlett, RN;PhD  
President, Society of Rogerian Scholars

We all have special memories and thoughts associated with Martha E. Rogers. When I think of her, I think of eclipses. An eclipse is a time when some object comes between us and a familiar sight, blocking familiar comfortable views and inevitably changing our reality. I recently read a book by Isaac Asimov and Robert Silverberg called *Nightfall*, in which a planet with six suns endures a total eclipse and is plunged into total darkness - an event that only occurs on this planet every 2050 years. During the eclipse the residents see the sky filled with stars, and this sight is so incongruent with their reality that most go insane; the remainder are forever changed.

My first association of Martha Rogers with eclipses came a number of years ago on a summer night in Augusta, Georgia. Martha was visiting the Medical College of Georgia campus and teaching in Sarah Gueldner's doctoral course on the Rogerian framework. One evening we sat on the verandah of the Partridge Inn, an old southern style inn with ceiling fans and rocking chairs. As the ceiling fans stirred the sultry night air, we watched a lunar eclipse through the boughs of the Magnolia trees, and we discussed the theoretical shape of the world, the universe, the cosmos. The world was not the same afterwards.

Martha brings an eclipse to each of us. She interposes her ideas between us and our comfortable view and, whether you agree with her or not, your view of the cosmos is irrevocably changed as she blocks out the sun and the moon and shows you the stars. She truly belongs to the cosmos.

In the fall of '93 there was another lunar eclipse, this one at 1 AM in the morning. While others had promised to arise and view this sight with me, when the appointed time arrive none could be awakened. So I viewed it in solitude in the crisp, clear evening, under a sky dazzled with stars, and a poem emerged. I sent this poem to Martha so that we could share another eclipse. I dedicated the poem to her in honor of her 80th birthday.

## Ecliptic Visions

An ebbing moon in a diamond sky,  
Following the seven sisters,  
and chased by the hunter,  
Punctuated by shooting stars.  
Seen through the barren lace of winter trees,  
It evaporates only to revive,  
Sparkling, livened and pristine.

Written November 29, 1993  
Dedicated to Martha E Rogers  
A Citizen of the Cosmos  
May 12, 1994.

# PSYCHOMETRIC ANALYSIS OF JOHNSTON'S HUMAN FIELD IMAGE METAPHOR SCALE

Linda W. Johnston, RN;PhD

## ABSTRACT

*This article describes the conceptual base and the psychometric analysis of the Human Field Image Metaphor Scale (HFIMS). This instrument was conceived and developed within the Rogerian Science of Unitary Human Beings. Human field image was defined as an individual awareness of the infinite wholeness of the human field. Two areas of content domain were identified as field manifestations of human field image. These were specified as being one's individual perception of potential and a perception of the integral nature of one's human and environmental fields. The metaphor was chosen as an appropriate holistic item form for this instrument, and a Likert-type scale with five degrees of response was utilized. Conceptual definition and item selection were conducted in close consultation with both Dr. Martha Rogers and other members of the Society of Rogerian Scholars to ensure content validity. A pilot study ( $N = 50$ ) and a major study ( $N = 358$ ) were conducted using convenience samples of healthy adults. Construct validity was established through comparison of scores on the HFIMS with scores on Gueldner's Index of Field Energy ( $r = 0.6647$ ), and through factor analysis. Reliability was determined using Cronbach's alpha ( $r = .9131$ ). The final form of the instrument consisted of 25 items with three factors. Possible scores on the instrument range from 25 to 125. Results of this study indicate that the Human Field Image Metaphor Scale is a valid and reliable instrument.*

It has been well documented in the literature that one's perception of self is vitally important to one's health and well-being (Coopersmith, 1967; Rosenberg, 1965). However, traditional conceptualizations of self-perception have been particulate in nature, thus inconsistent with the holistic philosophical tenets of the Rogerian Science of Unitary Human Beings. While recognizing the fact that an individual's perception of field does not in any way define or delimit the infinite nature of the field (Rogers, 1991a), it is postulated that one's perception of human field relates significantly to one's purposive participation in the choices that determine the nature and

pattern of life. However, investigations of this proposition require measurements conceptualized within a new worldview. A new instrument, the Human Field Image Metaphor Scale, conceptualized within the worldview of the Science of Unitary Human Beings, is herein reported. The conceptual base of the instrument is presented, and the psychometric development process is discussed.

### Conceptual Base

Human field image (HFI) is conceptually defined within the Rogerian system as an individual perception of the infinite wholeness of the human field (Rogers, 1991b) as it evolves within the human-environmental field process. Phillips (1990) suggested that HFI is best understood as one manifestation of the mutual process of human and environmental energy fields. He characterized HFI as "an evolving diverse manifestation of the human field pattern that synthesizes all past

**Key words** Human field image, M. E. Rogers, instrument development

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and projected future images into a four-dimensional (sic) picture of human beings" (1990, pp. 13 - 14). He further proposed HFI as one matrix of the patterning process from which human potentials emerge and through which one is able to perceive integrality with the environmental fields (Phillips, 1990). It follows, then, that HFI is one manifestation of the human and environmental patterning process, which may be expressed as a perception of one's potential and an awareness of one's integrality.

Field diversity is proposed as a correlate of HFI. Within this context, increased diversity of the human field is postulated to manifest itself as a sharper, more distinct field image, whereas a human field that is less diversified may manifest a blurred, or less sharp, image (Rogers, 1991b). Greater clarity of field image allows a more accurate perception of both the infinity of one's human field and the integrality with one's environmental field. Lesser clarity of field image would be associated with a distortion of this perception. Thus, persons with less diverse human fields may envision self-perceived boundaries, while those with fields that manifest greater diversity may transcend self-perceived boundaries. This proposition is central to the concept of HFI, which incorporates the self-imposition of perceived boundaries or perceived limitations upon the infinite nature of human fields as integral to the nature of the concept.

### **Instrument Development**

Research within the Rogerian conceptual system involves the identification and description of manifestations of human and environmental field patterning. Pattern, an abstraction, is unobservable. Manifestations of pattern are the only observable phenomena available for scientific research involving the human and environmental energy fields. Research that focuses upon patterning is non-reductionistic in nature in that the intent is to study human behavior as a manifestation of the whole rather than as

a component of the whole (Cowling, 1986).

The Human Field Image Metaphor Scale (HFIMS) was conceived and grounded within the Rogerian Science of Unitary Human Beings. Each phase of development was guided by a review of the relevant literature and consultation with Dr. Martha Rogers and other Rogerian scholars to provide initial and ongoing content validity. The concept analysis phase resulted in the delineation of two domains: (1) Perceived Potential and (2) Integrality. The domain of Perceived Potential includes manifestations of perceived boundaries or boundarylessness, while the domain of Integrality includes manifestations of the perceived human-environmental mutual process. Within this conceptualization, pattern is perceived as the unifying concept that permeates each domain and expresses field perception.

### **Methodology**

#### Item Generation

The metaphor was chosen as the item format for the HFIMS because metaphors are believed to promote holistic field expression. For example, "I feel like a bird in a cage" allows an individual to respond in a holistic manner to feelings related to integrality, whereas "I feel like a tree in springtime" taps feelings related to one's sense of potential.

The HFIMS is a Likert-type scale in which the stem, "I feel," is presented followed by 25 metaphors with which the respondent is asked to identify. Five stages of response, ranging from "Do Not Identify" to "Totally Identify," are indicated.

The generation and validation of metaphors for the HFIMS followed the guidelines established by Lynn (1986) and included a literature review and expert consultation to establish content validity. The investigator synthesized content from the two identified domains to compile an initial list of 65 metaphors believed to be conceptually congruent with both the Science of Unitary Human Beings and the manifesta-

tions described as human field image. The investigator then consulted with other Rogerian scholars, including approximately 45 persons attending a regional Rogerian conference, and the list was expanded to include 105 possible metaphors. This list was then subjected to theoretical scrutiny by the investigator. The 40 metaphors evaluated as having the closest conceptual fit with the two identified domains were retained. This refined list was then presented at various regional and national meetings of Rogerian scholars for review. Reviewers evaluated the metaphors as to content domain, consistency with the Rogerian framework, and clarity. Using these responses, the investigator reduced the list to 32 metaphors.

#### Pilot-Testing

The 32-item instrument was pilot-tested using a convenience sample consisting of 50 healthy adults ranging in age from 20 to 53. Participants completed the HFIMS, the Index of Field Energy (IFE) (Gueldner, 1993), and a Demographic Data Sheet. Principal components factor analysis was used to establish construct validity. Factors were compared to the theoretically proposed structure of human field image to evaluate theoretical congruence. Six factors were identified using principal components analysis followed by Varimax rotation. After careful scrutiny, two single-loading items were dropped from the scale, resulting in a 30-item instrument loading onto four factors.

Additionally, scores on the HFIMS were correlated with scores on the IFE. Because the IFE and the HFIMS were thought to measure related constructs, it was proposed that the correlation would reflect this relationship while not being so high as to indicate that the two constructs were identical. The observed correlation of scores was .5928 which was significant at the  $p < .01$  level of significance. The overall reliability of the pilot-tested instrument was

demonstrated by a Cronbach's alpha of 0.9291.

#### Major Testing

The HFIMS was then tested in a convenience sample of 358 healthy adults between the ages of 18 and 85. The same process of data collection was followed as in the pilot study. Analysis of the data for validity and reliability was conducted to determine the final form of the HFIMS. As in the pilot study, internal reliability was established using Cronbach's alpha. Similarly, construct validity was determined by factor analysis and by comparing scores on the HFIMS with scores on the IFE using the Pearson product-moment correlation. In addition, each factor was theoretically scrutinized to assist in decisions related to item retention and deletion.

Five factors were identified as having eigenvalues of 1.0 or greater. A variable-factor correlation of .40 was selected as a minimum loading level of significance (Mishel, 1981). The items clustering on each factor were scrutinized to determine a conceptual interpretation for each factor. The items on Factor One included nine items that demonstrated the heightened sense of integrality and six items that demonstrated the positive perceptions of potential which were anticipated in persons with clear images of human field. Thus, this factor was labeled "expressions of clear human field image." Factor Two included five items that demonstrated the sense of isolation and two items that demonstrated the diminished perception of potential which were expected in persons with blurred images of human field. For this reason, this factor was labeled "expressions of a blurred human field image." Three of the items on Factor Three demonstrated positive expressions of integrality. The fourth item had a comparatively weak loading of .49 combined with a nonsignificant loading of .38 on another factor.

Because of the ambiguity regarding factor loading, this item was dropped from the scale. The remaining three-item factor was labeled "Integrality."

The three items loading on Factor Four demonstrated positive perceptions of potential. Theoretically, these items were expected to load onto Factor One. Their failure to do so, combined with a desire to reduce the total number of items, led to the decision to eliminate these items from the scale. Factor Five had only one significant factor loading; therefore, that item was also eliminated from the scale. The three remaining factors accounted for 54.8% of the item variance.

#### Final Form

The final form of the HFIMS consists of 25 metaphors. Twelve items express a strong sense of integrality, and two items express a sense of isolation. Six items express an expanded perception of potential, and five items express a restricted perception of potential.

The majority of the 25 items loaded significantly on only one factor, thus achieving the goal of Varimax rotation for these items. Seven items, however, had significant loadings on both Factor One and Factor Three. Consideration was given to eliminating these items from the final scale to achieve a two-factor scale which would distinctly reflect either clear or blurred expressions of human field image. It was decided, however, that the presence of the third factor was theoretically congruent with this highly abstract concept. Thus the decision was made to leave the items on Factor Three in the scale at this time.

The overall reliability coefficient for the 25-item scale is a Cronbach's alpha of 0.9131. The correlation between the HFIMS and the IFE for the final scale is .7056.

#### **Discussion**

The results of this study indicate that the Human Field Image Metaphor Scale is a valid and reliable instrument. It has been

grounded and developed within the Rogerian Science of Unitary Human Beings; thus it will be a valuable research tool for those researchers who are conceptualizing their investigations within this abstract system. Furthermore, this newly developed scale will facilitate the efforts of practitioners to more effectively examine the human field image of individuals and groups from a unitary perspective.

This instrument will provide valuable insight into the pattern manifestations related to the individual's perception of integrality with his or her environment and his or her perception of potential. It is proposed that these two important manifestations of field patterning, which are reflected in the HFIMS, are integrally related to one's beliefs and practices related to health and well-being. It is postulated that the individual who has a clear image of human field will be motivated to participate knowingly in the choices and changes of life. Conversely, an individual with a blurred image of human field will be more inclined to be passive and less motivated to knowingly participate in changes related to health and well being. It is further postulated that persons with a clear image of human field will have a heightened perception of potential and integrality, thus facilitating transcendence of artificial limitations. Persons with a blurred image of human field are proposed as being more vulnerable to such artificial limitations, perceiving them as boundaries.

Further testing of the HFIMS in a variety of populations, which are believed to be characterized by varying clarities of human field image, is needed. Possible examples of such populations include those who are identified as experiencing feelings of isolation or those who may perceive their potential as limited due to reasons of race, gender, age, or physical challenge. Conversely, individuals who appear to transcend apparent barriers will provide a rich source of

data. Such testing may assist in the clarification of correlates of human field image.

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# SPIRITUALITY: A PATTERN MANIFESTATION OF THE HUMAN/ENVIRONMENT MUTUAL PROCESS

Violet M. Malinski, RN;PhD

## ABSTRACT

*Although the word spirituality does not appear in Rogers' Science of Unitary Human Beings, the meaning of the word seems to be reflected in the principle of integrality. The author proposes a view of spirituality as a pattern manifestation of the principles of homeodynamics, especially the principle of integrality. Parallels with similar views of spirituality emerging in other disciplines are explored.*

Although "spirituality" is a common concept reflected in both nursing and general literature, it does not appear in the writings of Martha E. Rogers on the Science of Unitary Human Beings. However, a phrase emerges that, for this writer, captures its essence: "the continuous mutual human field and environmental field process" (Rogers, 1990, p. 8). This is the definition of integrality, one of Rogers' three principles of homeodynamics. The author proposes that spirituality is intrinsic to Rogerian nursing science as a pattern manifestation of this human/environment integrality or mutual process. The principles of homeodynamics together present a way of describing the human/environment mutual process. Therefore, the author further proposes that this pattern manifestation actually reflects all three principles, integrality, resonancy, and helicy.

Discussions of spirituality often assume a mind-body-spirit triad, with spirituality clearly linked to the realm of the spirit.

Such identification of interrelated parts of the human as a system works well within the framework of systems theory. However, as Cowling (1993) so cogently showed, the systems perspective is not the same as unitary knowing, and it is this unitary perspective that underlies Rogers' Science of Unitary Human Beings. This point, along with the tendency to equate spirituality with religion, at least partly accounted for Rogers' reluctance to discuss the concept of spirituality. Rapacz (1989) and Reeder (1989) briefly identified some of Rogers' concerns with this concept.

At one point Rogers did use a similar concept, that of transcendence. In the late 1970s she offered "less differentiated...more differentiated...transcendent" as one of what she then called the Postulated Correlates of Unitary Human Development (Rogers, 1978). Cowling (1986), who in the early 1980's had studied mystical experience, differentiation, and creativity, described these correlates as suggesting "movement toward an increasingly diverse field pattern with perceptual features of *timelessness, continuousness, beyond waking, transcendence, visionary, and ethereal*" (p. 132). To the best of this author's recollection, Rogers' re-evaluated the "correlate" of transcendence as dichotomous and dualistic, deleting it

**Key words** Rogerian nursing science, homeodynamics, spirituality, integrality

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from the list that finally appeared in print (Malinski, 1986).

Reed (1991a, 1991b) examined lifespan development theories and derived the concept of self-transcendence, which she then reformulated using Rogerian nursing science to derive a nursing theory of self-transcendence. As a key theoretical assumption, Reed (1991a, p. 5) identified "a sense of connectedness within the self and with one's environment." She defined self-transcendence "as the expansion of one's conceptual boundaries inwardly... outwardly... and temporally...." (Reed, 1991a, p. 5) and proposed it as "a pattern associated with advanced development that can occur in the context of a significant life event. In particular, life experiences that increase awareness of personal mortality...." (Reed, 1991b, p. 71). Although the language better reflects a systems perspective than a unitary one, Reed clearly seems to be describing a dynamic, evolving process "characterized by increasing diversity of energy field patterning" (Rogers, 1990, p. 9), words Rogers chose to describe the manifestations of field patterning, formerly known as the correlates of unitary human development. Indeed, according to Smith (1992), who conducted a Rogerian study of spirituality and power in those with and without polio, Rogers indicated to her that transcendence is a pandimensional experience, "a manifestation of increasingly diverse, higher frequency human field patterning" (p. 5). Given more time, perhaps Rogers would have been willing to re-examine concepts such as spirituality and transcendence in light of Rogerian nursing science. In order for this author to conceptualize spirituality as a pattern manifestation of integrality that reflects the other two principles of homeodynamics, as well, it is useful first to review Rogers' development of the principles over time.

### **The Principles of Homeodynamics**

In *An Introduction to the Theoretical Basis of Nursing*, Rogers (1970) originally

identified four principles of homeodynamics: reciprocity, synchrony, helicy, and resonancy. Reciprocity "postulates the inseparability of man (sic) and environment and predicts that sequential changes in the life process are continuous, probabilistic revisions occurring out of the interactions between man and environment" (Rogers, 1970, p. 97). Although couched in now out-dated language, the focus of reciprocity can be identified as the mutual process of human and environmental fields. According to synchrony, "Change in the human field depends only upon the state of the human field and the simultaneous state of the environmental field at any given point in space-time" (Rogers, 1970, p. 98). Again, the language is out-dated, but the focus can be identified as simultaneity. "Helicy is a function of continuous innovative change growing out of the mutual interaction of man and environment along a spiralling longitudinal axis bound in space-time" (Rogers, 1970, p. 101). Rogers further stipulated that rhythmicity, negentropic evolution, and the unitary man-environment relationship were encompassed within the principle of helicy. Thus, this principle "subsumes within it the principles of reciprocity and synchrony" (Rogers, 1970, p. 99). This is a logical conclusion given the focus of reciprocity on mutual and synchrony on simultaneous. Resonancy "postulates that change in pattern and organization of the human field and the environmental field is propagated by waves" (Rogers, 1970, p. 101).

In 1976, as a doctoral student sitting in the then "Science of Man" graduate course that Rogers taught at New York University, this author learned about three principles of homeodynamics: helicy, resonancy, and complementarity (mutual process). Class notes from the time reflect that Rogers deleted reciprocity (mutual) and synchrony (simultaneous) as separate principles because they were subsumed within helicy. She also presented complementarity

as inherent in helicy. However, she identified it as a separate principle because it contradicted adaptation and the view of person and environment as dichotomous and reflected the mutual simultaneous "interaction" of man (sic) and environment that is rooted in a universe of open systems.

In her description of Rogerian nursing science for the conceptual models book edited by Riehl and Roy, Rogers (1980) identified these same three principles. She wrote the following about complementarity: "The interaction between human and environmental fields is continuous, mutual, simultaneous" (Rogers, 1980, p. 333). Rogers indicated that, although complementarity was subsumed within helicy, she offered it as a separate principle for the sake of clarity. Later Rogers (1986, p. 6) wrote, "The principles [of homeodynamics] are stated so that they are mutually exclusive to avoid the confusion that attended earlier definitions." Together, however, they "postulate the nature and direction of change" (Rogers, 1986, p. 6). She re-named complementarity as integrality to better capture the meaning of the principle.

For this writer, it is difficult to view the principles of homeodynamics as "mutually exclusive" given the unitary, indivisible nature of humans and environment presented so beautifully in the Science of Unitary Human Beings. The principles are distinct but not separate. Also, Rogers seemed to focus on helicy as inclusive of many of her other ideas. Given the primacy of the human/environmental field process in this nursing science, another view of the principles might be to see resonancy and helicy as flowing within integrality. Integrality is the "context" for the process of "continuous change from lower to higher frequency wave patterns" (resonancy) and for the nature of change, the "continuous innovative, unpredictable, increasing diversity of human and environmental field patterns" (helicy) (Rogers, 1990, p. 8). Spirituality as

a pattern manifestation of human/environment integrality would thus reflect helicy and resonancy, as well. A theory of spirituality derived from Rogerian science would also reflect the three principles of homeodynamics.

Other views of spirituality seem to capture the essence of person/environment mutual process, although the words used tend to be "connected" and "interconnected," often reflecting systems thinking. A few seminal ideas are highlighted below.

#### **Interdisciplinary Views of Spirituality**

Spirituality is often assumed to be synonymous with religion. However, it is not. Spirituality is inclusive, whereas organized religions tend to be exclusive. Spirituality can exist independent of any formal religious orientation. In a three-person dialogue David Steindl-Rast and Thomas Matus, Benedictine monks, and Fritjof Capra, physicist, struggled together with the meanings of spirituality and religion. Matus (Capra & Steindl-Rast, 1991, p. 12) gave priority "to spirituality as experience, a direct knowledge of absolute Spirit in the here and now, and as praxis, a knowledge that transforms the way I live out my life in this world." Steindl-Rast (Capra & Steindl-Rast, 1991) described spirituality as a sense of belonging: "I belong to all the animals, to the plants...I am responsible for them and to them...We all belong together in this great cosmic unity" (p. 15). For Capra (Capra & Steindl-Rast, 1991) spirituality is a sense of connectedness to the cosmos, manifested in the growing ecological awareness of interdependence and interconnectedness that represents a spiritual view emerging in what he calls new-paradigm thinking in science.

From the perspective of transpersonal psychology, Grof and Grof (1990) describe spirituality as a characteristic of the individual's relationship to the universe which exists independent of any mediating presence, requiring neither a formal structure nor the presence of clergy. They view the word

"transpersonal" as reflecting the direct experience of spiritual realities. For the individual, transpersonal experience involves a transcendence of both ordinary sense perception and ego-identification as a separate individual, bounded by space and time. Their work encompasses both spiritual emergence, "the movement of an individual to a more expanded way of being that involves enhanced emotional and psychosomatic health, greater freedom of personal choices, and a sense of deeper connection with other people, nature, and the cosmos" (p. 34), and spiritual emergency. In the latter case, this natural process becomes a crisis, with the individual feeling so disoriented and bombarded by new experiences that he or she has difficulty functioning in everyday life. The person may then come into contact with mental health professionals who misdiagnose the process as psychosis. Although spiritual emergence is an innate potential that can be actualized by anyone, some individuals, in such a crisis situation, may need assistance in recognizing, accepting, and working through the process.

Anderson and Hopkins (1991) spent 4 years traveling across the North American continent, interviewing over 100 women about the unfolding of their spirituality and the role of the sacred in their lives. Relationship and choice emerged as core themes: relationship as connection, choice as the way one transforms knowledge into action, beginning "the process of spiritual maturing" (Anderson & Hopkins, 1991, p. 102). Living in relationship means awareness of community among human and nonhuman life forms.

When interviewed by Anderson and Hopkins, Vijali Hamilton described her World Wheel, the environmental sculptures and ritual performances she is creating across the 30th latitude of the Earth to fulfill a dream in which she saw a giant circle enfolding the planet. Involving indigenous artists and performers in each place she

visits, Hamilton uses responses to questions about how the people came to be there, the problems they face, and what they think will heal them to create special sculpture and ritual theater in each place. For her, this process invokes the "the origin of art when the shaman painted the walls of caves for the nourishment and direction of the community; when theatre was a spontaneous expression of the hopes and fears of the people; when art was not just a commodity but integral to life because it united the earth, plants, animals, and humans into one interdependent family" (Anderson & Hopkins, 1991, p. 176).

The garden as a metaphor of interconnection emerged for Hopkins and Anderson as well as for Steindl-Rast, Matus, and Capra. "Gardens can be entered in a thousand ways and at any time" (Anderson & Hopkins, 1991, p. 15); there is no one "true" spiritual path. The garden cycles through life in a diversity of manifestations, none inherently more evolved than another, for "who could argue that a garden of daisies and hollyhocks was more developed than a garden of artichokes and asparagus?" (p. 16). The wise gardener learns to go with the flow of the garden's life, tending and nurturing rather than attempting to control, becoming integral with the flow rather than external to it.

Starting with the Garden of Eden, Steindl-Rast introduced the garden metaphor in his discussions with Capra and Matus. He described the garden and the gardener as distinct, as is the apple from the orange tree and the rabbit from the cabbage, but not separate. Separation occurred after the Biblical Fall; prior to that the human being was integral with the garden, with the cosmos. This separation, according to Steindl-Rast, placed human above nature, conferring the ability to destroy nature if freedom and responsibility become disconnected. For Capra (Capra & Steindl-Rast, 1991), this means that humans have "secu-



larized the garden and made it just a machine" (p. 94). Matus (Capra & Steindl-Rast, 1991, p. 95) agreed: "The destruction of the environment did not begin so much with the separation of the gardener from the garden as with the gardener's beginning to see the garden as a machine, subject to the operative will of the human in the driver's seat." Stewardship rather than ownership of the garden is reflected in Capra's new-paradigm thinking in science where ecological awareness is spiritual awareness. New-paradigm thinking recognizes the essential interconnectedness of all life.

Alexander (1979) and his colleagues at the Center for Environmental Structure in Berkeley, California, wrote a series of books describing the "timeless way of building, — "a process through which the order of a building or a town grows out directly from the inner nature of people, and the animals, and plants, and matter which are in it" (p. 7). Such a way of building resonates with the beauty and serenity of nature, with the constructed environment coming alive as it assumes the character of nature. Density, promenades, community projects, health centers, light, gardens, terraces, still water, flowing water, animals, birth places, grave sites, trees, stairs, window places, and half-open walls are just a few of the 253 patterns discussed by Alexander and his colleagues as they describe the process of this timeless way of building (Alexander et al., 1977). They stress how essential it is that constructed environments offer opportunities for people to "reach into themselves and be in touch with nothing else but nature" (p. 816).

In the literature reviewed, descriptions of person/environment connectedness or interconnectedness abound. Words such as community, unity, belonging, interconnected, connected, transcendence, and transpersonal emerge in descriptions of spirituality. The garden and the gardener often emerge as a metaphor for the person-envi-

ronment mutual process. Couched in different language, that of Rogerian nursing science, the words and descriptions seem to capture the essence of integrality, with spirituality emerging as a pattern manifestation of this human/environment integrality. **Spirituality as a Pattern Manifestation of Integrality**

Manifestations of field patterning express the four postulates of Rogerian nursing science, energy fields, pattern, pandimensionality, and openness, and the three principles of homeodynamics. The way people experience their world can be seen in the diverse manifestations of field patterning that emerge. This changing patterning also conveys information about the choices people make to actualize some potentials and not others.

This capacity to knowingly participate in the mutual change process of human and environmental field patterning was the assumption guiding Barrett's (1986) theory of power as knowing participation in change. The tool she developed assesses power across lower and higher frequencies in awareness, choices, freedom to act intentionally, and involvement in creating changes.

Smith (1992) explored the relationship between this power and spirituality in a combined sample of people who survived polio and those who never had it. She found a significant low to moderate relationship between power and spirituality. "As individuals continue knowing participation in change, choosing to actualize potentials associated with spirituality, they further develop a way of being or experiencing the life process that manifests as spiritual values; and as their spirituality increases, their power becomes greater" (Smith, 1991, p. 5). She further suggests that spirituality "grows through continual, mutual process when individuals make choices to actualize potentials which reflect a sense of meaning in life, interconnectedness with all living things, and awareness of a transcendent

dimension or Being" (Smith, 1992, p. 7).

This mutual process is integrality. Awareness, choices, and creative actualization of potentials involve the process and nature of change described in resonancy and helicy. Awareness of integrality is a unitive, integral awareness that informs the way people live their lives. It can be seen in the choices they make, the creative involvement they manifest, and the freedom they envision. It is awareness of the integrality of the human/environment mutual field process rather than awareness of something greater, above and beyond this process. In Rogerian nursing science, the human/environmental mutual process is the ultimate reality or source; there is nothing above and beyond, different and separate. The discussion that appears in literature on spirituality that reflects these two themes is that of God as immanent versus transcendent. Given Rogers' comment to Smith noted above that transcendence is higher frequency field patterning, the traditional distinctions between these two words no longer applies. What is immanent in the human/environment mutual process is the potential for increasingly diverse and creative field patterning—transcendence.

As Capra (Capra & Steindl-Rast, 1991, pp. 104-105) phrased it,

...the fallacy has been that we think, Let's take the universe as a whole, and let's just add up everything... Now, that's a fallacy, because we are clearly not talking about the universe as a whole... If I call the universe everything that exists, including all processes, ideas, and so forth, God is immanent in the universe. But if I say that the universe is all the things I know,...then God clearly transcends that....

### Conclusion

Pandimensional awareness of the mutual human/environmental field process (integrality) is a manifestation of higher

frequency patterning (resonancy) associated with innovative, increasingly creative and diverse (helicy) experiences reflective of what is called spirituality in the literature. The awareness of the unitary human being, the choices he/she makes, the experience of involvement in creating changes, and freedom to create changes reflect this unitive, integral awareness of life, human and nonhuman alike.

This view of spirituality must be examined for its logical derivation from Rogerian nursing science. It is important for Rogerian scholars to examine the author's assumption regarding the three principles of homeodynamics. Whereas Rogers seemed to imply that helicy was the most inclusive, this author suggests that integrality is the "context" for helicy and resonancy. This view identifies the phenomenon of concern as the human/environment mutual process, not the unitary human being. It is possible that this is a semantic difference rather than a conceptual one. The environmental field is implicit when Rogerians speak of the unitary human. However, the author welcomes commentary and critique on this view of spirituality as a pattern manifestation of the principles of homeodynamics, particularly integrality.

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# INTEGRATED AWARENESS: A KEY TO THE PATTERN OF MUTUAL PROCESS

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## ABSTRACT

*Nursing science has entered into a phase of transition and revolution. Never before has there been such a flux of creative ideas to challenge nurse scholars' scientific visions and to create a more diverse horizon in which to integrate those phenomena. There exists a need for continued exploration into more abstract and complex phenomena. Even though these phenomena may be less amenable to empirical validation, such quests are crucial to the further evolution of nursing science. Martha Rogers' Science of Unitary Human Beings has provided a rich landscape in which to elucidate those concepts.*

*The focus of this theoretical exploration is directed toward analysis and elucidation of the concept, integrated awareness, and its salience to Rogers' principles of homeodynamics. Integrated awareness is postulated to give a sense of unity, direction, and power to one's life and is further proposed to be a crucial aspect of mutual human field process. Integrated awareness is envisioned as a concept with direct relevance to the nature of human to human mutual process, a phenomenon of critical importance to well-being.*

*Integrated awareness involves the creation of a matrix in which one is cognizant of a greater awareness of self and environment, including living and nonliving entities as well as the potential for mutual process to occur. Integrated awareness implies an abstract sense of connection or mystical transcendence wherein human and environmental energy fields evolve. It may be perceived as a unifying schema of inner peace, serenity, well-being, and power.*

*Because of the nature of the complex human phenomena that nursing must address, a conceptual system specific to nursing's area of concern is necessary to discover and refine issues for research. This delineation of the concept, integrated awareness, through concept analysis provides a valuable foundation for theory development as well as further inquiry and research into this specific and complex human phenomenon.*

**The new knowledge . . . frees us from the chains of a most narrow dungeon and sets us at liberty to rove in a more august empire . . . of an infinite space, of so worthy a field, and of such beautiful worlds.**

Giordano Bruno as cited in LeShan (1984, p. 8).

**Key Words** Integrated awareness, M.E.Rogers, Science of Unitary Human Beings, nursing theory, concept analysis

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The discipline of nursing, by virtue of its existential being, continues to evolve. This evolution is inherent to the nature of knowledge and the process of science in transition. A plethora of questions continue to arise regarding the focus and direction of the discipline of nursing. Is nursing an art or is it a science? Is nursing's knowledge unique to the phenomena of its concern or has all knowledge possessed by nursing been acquired from other scientific disciplines then molded, sculpted, synthesized, and adapted for use in the practice of nursing? If so, is nursing a scholarly and academic realm or only a practice realm? To be considered a scholarly and academic disci-

pline as well as a practice discipline, nursing must have a unique body of knowledge based on theories of nursing (Rogers, 1970, 1986). Theories provide direction for a science, determining both the questions to be asked and the manner of query appropriate to answer the questions (Kuhn, 1970). Nursing, as a newly evolving science, has often experienced confusion about its theoretical base and therefore the direction and manner of scholarly inquiry. This quandary and lack of direction has spurred continued rhetorical discourse and debate among nurse scholars who continue in their quest to refine nursing's unifying focus and the direction of nursing research and practice.

Science does not exist without the theoretical underpinnings upon which to structure the evolution of knowledge. The construction of theory, which will bear relevance to nursing as a scholarly discipline and a science, is the ultimate desired outcome of acquiring knowledge specific to nursing phenomena. If theory is to become critical to the structure of the discipline of nursing, then concepts that are relevant to nursing phenomena must be identified, explored, and explicated.

Scientific theory development depends on identification of natural phenomena that are of particular concern to scholars in any discipline. Schlotfeldt (1987) stated:

It is the responsibility of nursing scholars to advance, clarify, verify, and organize knowledge of those phenomena [relevant to nursing] through promulgating and testing relevant and promising theoretical constructs. (p. 66)

As in many disciplines, nursing is experiencing a paradigmatic diversity in which theorists such as Martha Rogers are striving to free nursing from an old worldview that is heavily rooted in empiricism. Instead, Rogers proposed a new worldview that paves the way for exploration of more abstract and elusive concepts that may enhance the evo-

lution of nursing as a unique science. The new worldview and the vision of the future will generate knowledge specific to nursing's metaparadigm. With this vision, old concepts will be redefined and new concepts will emerge.

Walker and Avant (1988) consider concepts as one of the three basic elements of theory building. A concept is an idea or abstraction that provides knowledge about the essence of a phenomenon (King, 1988). Concept analysis clarifies the association of feelings, values, mental processes, and attitudes that accompany the internalization of word labels associated with those phenomena and is considered a steppingstone in the process of theory construction (Chinn & Jacobs, 1987). Integrated awareness, an emerging concept within the framework of the Science of Unitary Human Beings, is herein presented. The conceptual fit of integrated awareness with the Rogerian theoretical framework as well as practice and research applications are discussed.

### **Overview of the Science of Unitary Human Beings**

In developing a concept, congruence with the scientific framework is crucial. Rogers revolutionized the evolution of nursing as a science with the publication of *An Introduction to the Theoretical Basis of Nursing* in 1970. She synthesized her thoughts about the natural world with the hard sciences of physics and biology. This explosion of creativity combined with her knowledge of Eastern philosophy, psychology, and the paranormal realm, encouraged Rogers to abandon the Cartesian dualism which had so plagued the discipline of nursing and to shift the focus of nursing's concern to the phenomenon of unitary human beings. Rogers' Science of Unitary Human Beings, which provides the conceptual underpinnings for integrated awareness, is based on four concepts and three principles. Rogers (1970, 1986) identified unitary human beings and their environments as the central focus of

her conceptual system. Human beings and their environment are regarded as irreducible wholes which cannot be understood if reduced to their particulate components. Rogers (1992) defined the unitary human being as "an irreducible pandimensional energy field identified by pattern and manifesting characteristics that are different from those of the parts and cannot be predicted from knowledge of the parts" (p. 7). The environment was defined as "an irreducible, pandimensional energy field identified by pattern and manifesting characteristics different from those of the parts" (p. 7). The human and environmental fields change continually, mutually, and creatively, and are infinite and integral with one another (Rogers, 1986). The definitions of unitary human beings and their environments incorporate the four concepts of the Science of Unitary Human Beings: (1) energy fields, (2) openness, (3) pattern, and (4) pandimensionality.

Rogers (1990) defined energy fields as the fundamental unit of the living and the nonliving. Field is a unifying concept, and energy signifies the dynamic nature of the field. Energy fields are infinite and exist without boundaries. In conceptualizing openness, Rogers (1990) postulated that the universe is one of open systems. Openness signifies continuous and innovative change where causality is not an option. Pattern was defined as an abstraction which gives identity to the field. Each human field pattern is unique and is integral with its own unique environmental field pattern. The nature of the pattern changes continuously (Rogers, 1986). Rogers (1992) defined pandimensionality as: "a nonlinear domain without spatial or temporal attributes" (p. 7). Pandimensionality encompasses the human and environmental fields.

The four concepts provide a base for the three homeodynamic principles underpinning the Science of Unitary Human Beings: (1) resonancy, (2) integrality, and (3) helicy. These mutually exclusive principles

state explicitly and concisely Rogers' ideas about the human and environmental field patterns. According to Rogers (1986) the key concept in the three principles is pattern; all three principles describe the pattern of unitary human beings as they evolve. The principle of resonancy is described as "the continuous change from lower to higher frequency wave patterns in human and environmental fields" (Rogers, 1990, p.8). Resonancy delineates evolutionary change in energy field patterns, both human and environmental. The principle of integrality is described as "the continuous mutual human field and environmental field process" (Rogers, 1990, p.8). Finally, the principle of helicy is defined as "the continuous, innovative, unpredictable increasing diversity of human and environmental field patterns characterized by nonrepeating rhythmicities" (Rogers, 1990, p.8). Helicy describes the nature of change and evolution.

#### **The Concept of Integrated Awareness**

The term "integrated awareness" does not appear as a unit in dictionaries. However, the individual words, "integrated" and "awareness," can be analyzed and then synthesized into a unitary construct. The word "integrated" stems from the root word integrate, which is defined in *The American Heritage Dictionary* (1985) as:

1. to make into a whole by bringing all parts together; unify.
2. to join with something else; unite. (p.667)

A related term which also stems from the root word, "integrate," and also bears relevance to the definition of integrated, is the word "integral." Integral is defined in *The American Heritage Dictionary* (1985) as:

1. essential or necessary for completeness; constituent.
2. possessing everything essential; entire.
3. a complete unit; whole. (p.667)

"Awareness" stems from the root

word, "aware," which is defined in *The American Heritage Dictionary* (1985, p.145) as:

- 1 Having knowledge or cognizance
2. conscious; recognition of something sensed or felt.
3. knowing; either by perception or by means of information
4. cognizant; sure knowledge and the recognition of it.

Integrated awareness, as a unitary construct, is envisioned as a concept with direct relevance to the nature of human to human mutual process, a complex phenomenon of critical importance to well-being. Integrated awareness is postulated to give a sense of unity, direction, and power to one's life.

A recurring theme, which is implied but not always explicitly stated throughout the literature related to the Science of Unitary Human Beings, is mutual process and its intimate relationship with human and environmental energy fields. Rogers has stated that pattern is a unifying manifestation of mutual process within human and environmental energy fields. She has suggested that inquiry be made into how to further illuminate the pattern inherent in mutual process (Personal Communication with Martha Rogers, Region 7 meetings of the Society of Rogerian Scholars, July, 1992). It is postulated that integrated awareness is the key to the pattern of mutual process. Mutual process entails an awareness of the creative processing of authentic power. Authentic power is present when one perceives meaningfulness and purpose in the events that occur in one's life (Zukav, 1989).

Integrated awareness involves the creation of a matrix in which one is cognizant of a heightened transcendence of self and environment, including living and non-living entities as well as the potential for mutual process to occur. This potential exists in all human beings, but may vary in the level of intensity and pattern manifesta-

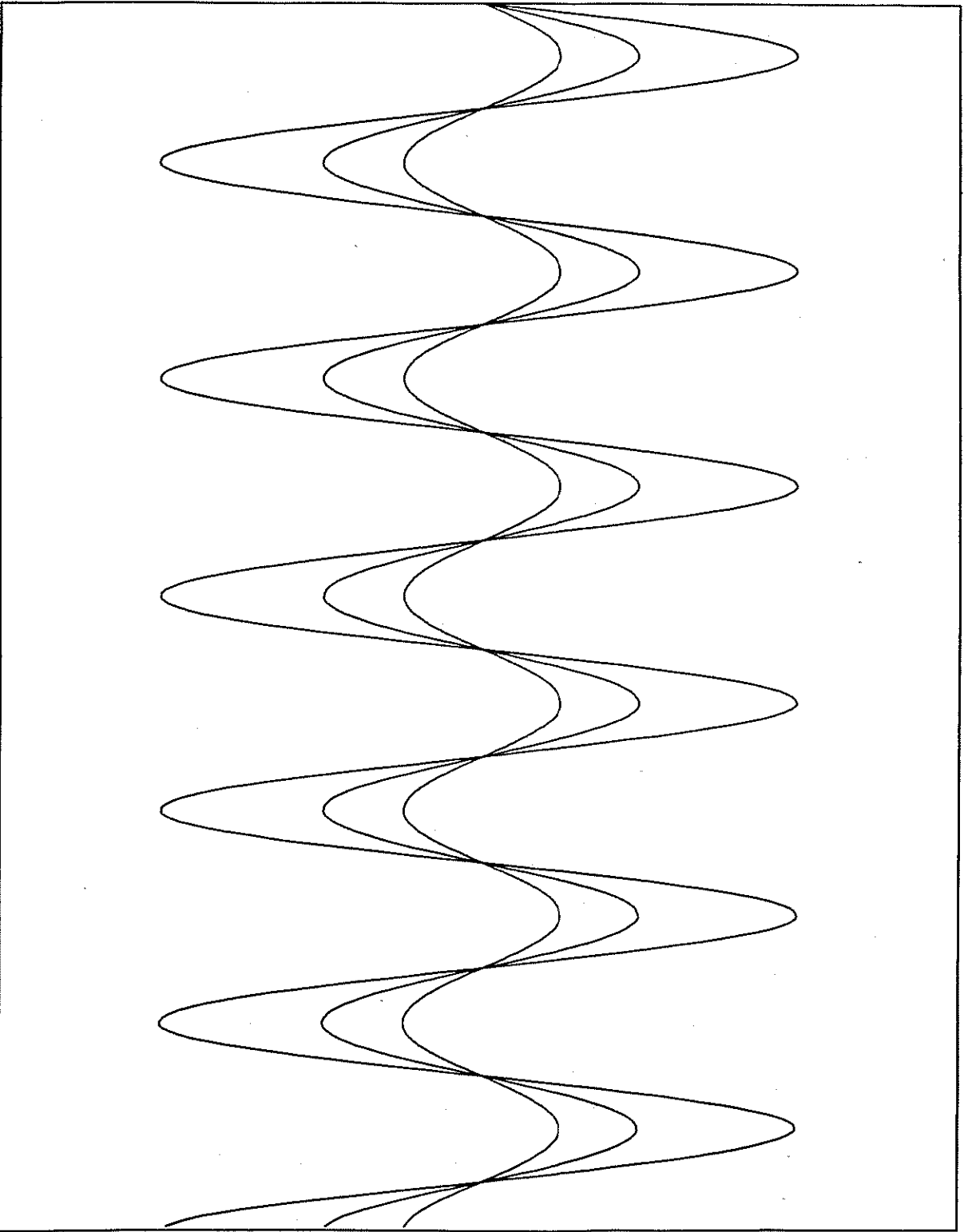
tion. Integrated awareness represents a dynamic, non-linear domain which is always present. The perception of manifestations of integrated awareness facilitates one in attending or listening to those human and environmental wave patterns that are meaningful. The perception of the moment of integration (mutual process) may be manifest as (1) a harmonious wave where the fields meet in a pattern of synchronicity, (2) a chaotic wave when fields meet in patterns of dissonance, or (3) where field wave patterns counterbalance to form a dampened wave form. Harmonious integrated awareness involves field patterns in which waves build on and complement each other and are increasingly high frequency and high amplitude (see figure 1). Integrated awareness may also exhibit a dissonance when energy fields meet in an asynchronous, chaotic or erratic pattern. This may be manifest as disharmony or field disconnection (see figure 2). Low intensity integrated awareness can occur when counterbalancing field patterns meet and dampen each other (see figure 3). Low intensity integrated awareness does not negate that mutual process is occurring, but rather places the experience in a less recognizable context. While these vignettes of integrated awareness present three possible patterns, infinite pandimensional variations of these are possible.

#### **Review of Related Literature** **Science of Unitary Human Beings**

Many of the concepts which are interspersed throughout the literature related to Rogers' Science of Unitary Human Beings express a commonality or relatedness to the concept of integrated awareness. These exemplars of Rogers' Science of Unitary Human Beings will be explored and their salience to integrated awareness will be elucidated.

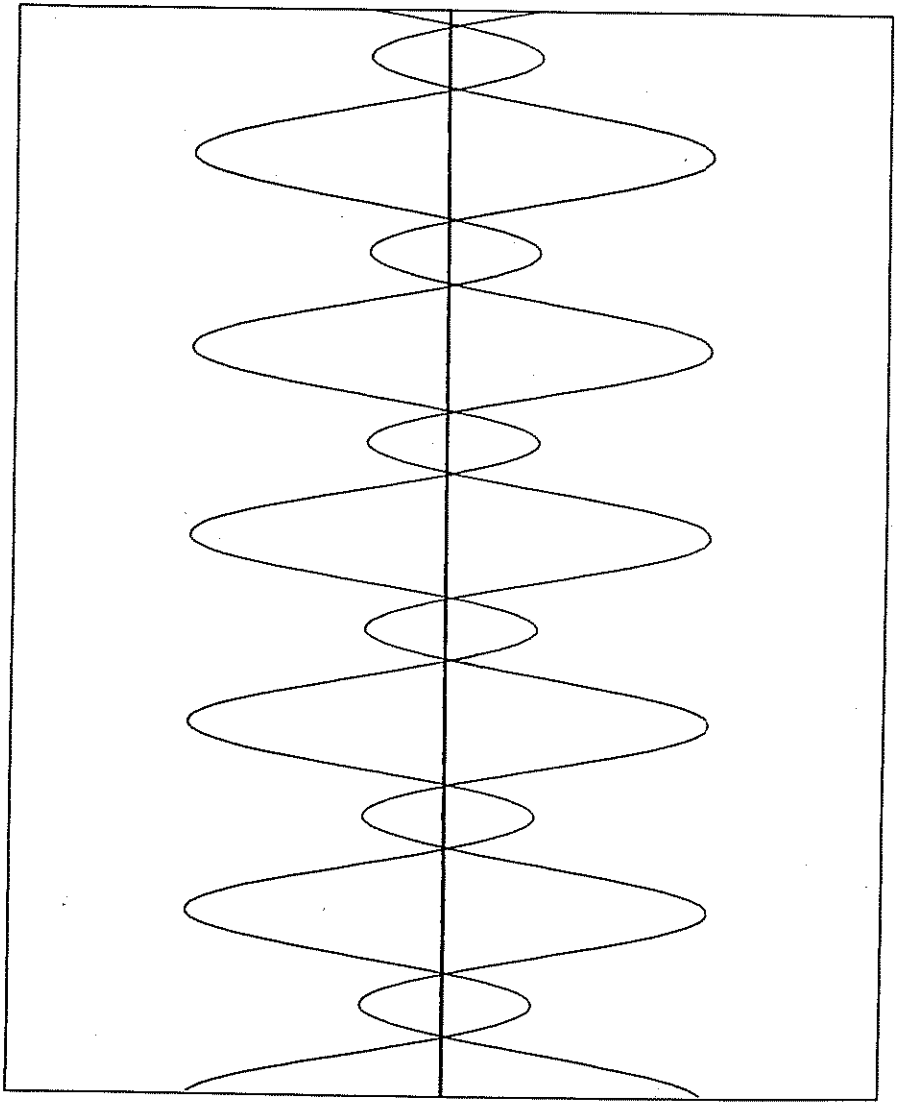
Motion of Energy Fields. Ference (1986), investigating motion of the human field, postulated that the relationship of

**Figure 1: Harmonious Energy**





**Figure 3: Dampened, Opposing Energy**



**Figure 3: Dampened, Opposing Energy**

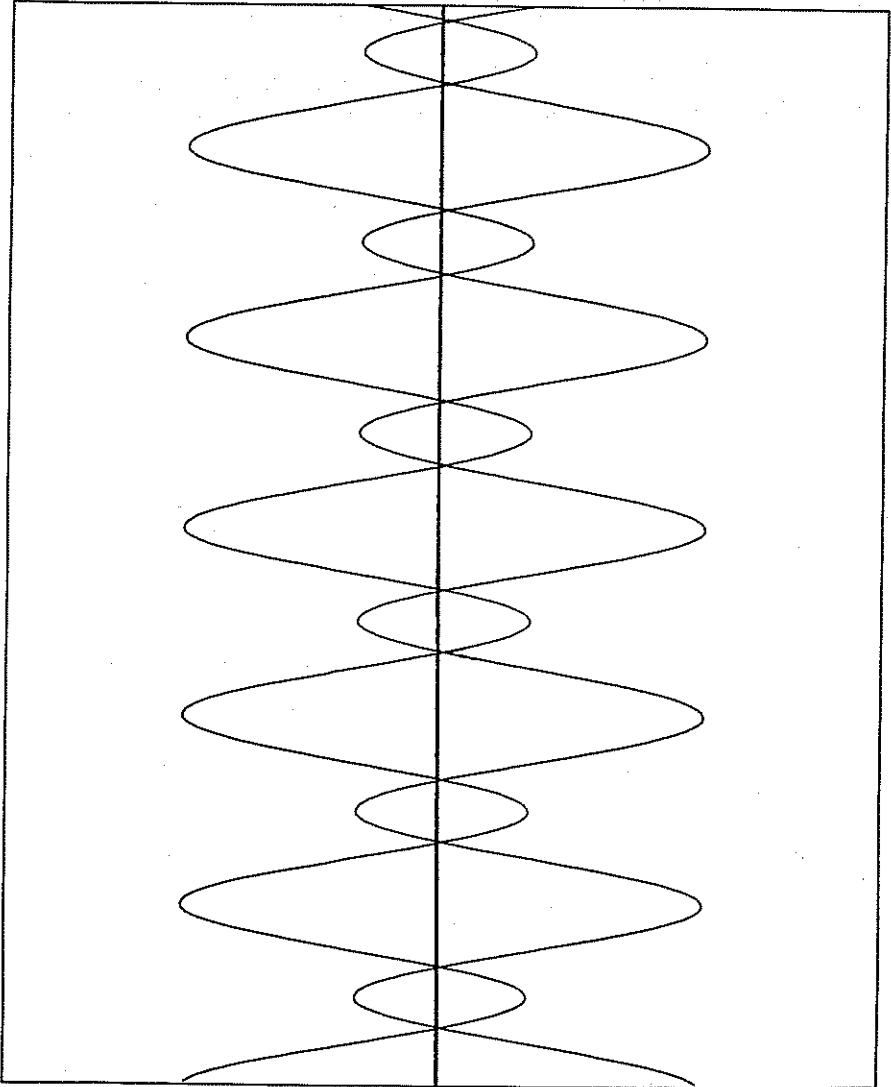
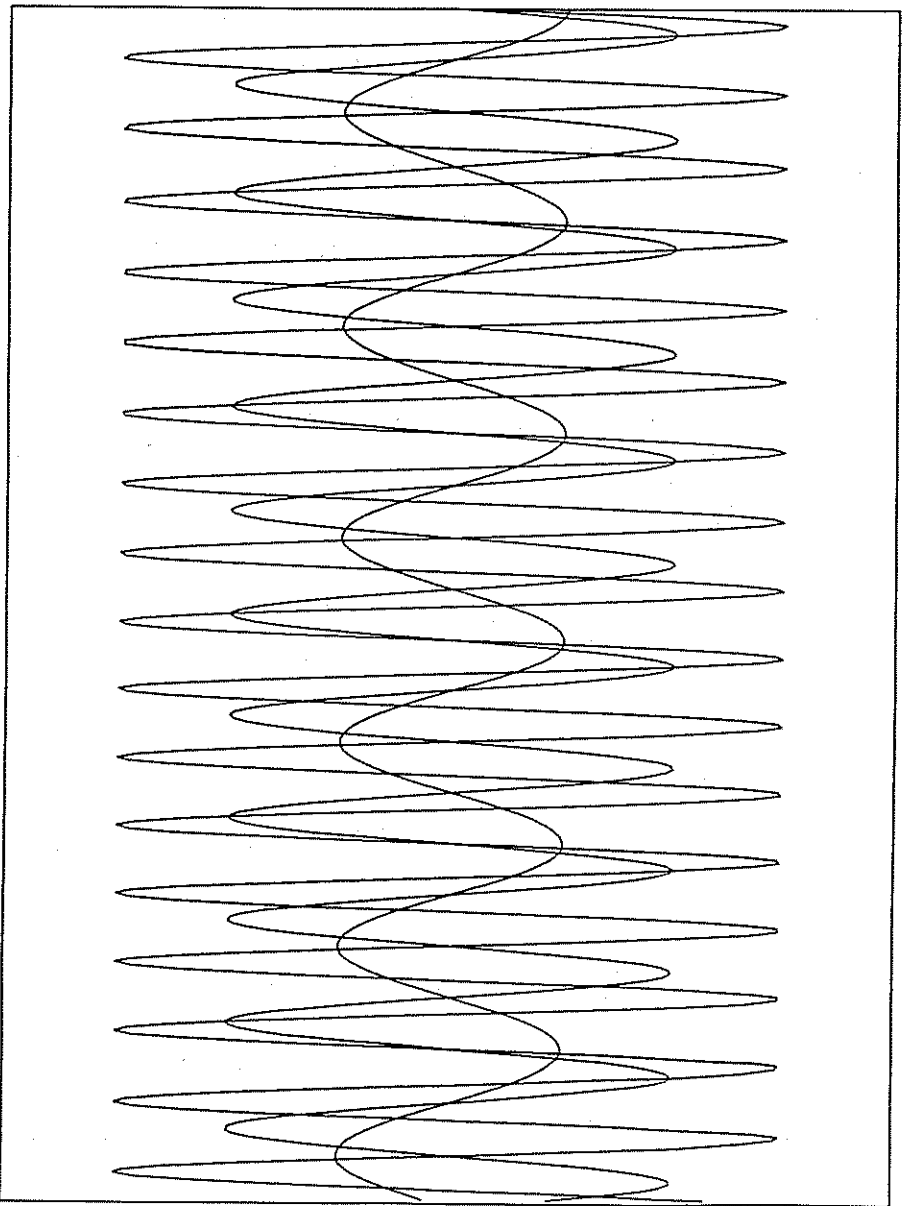
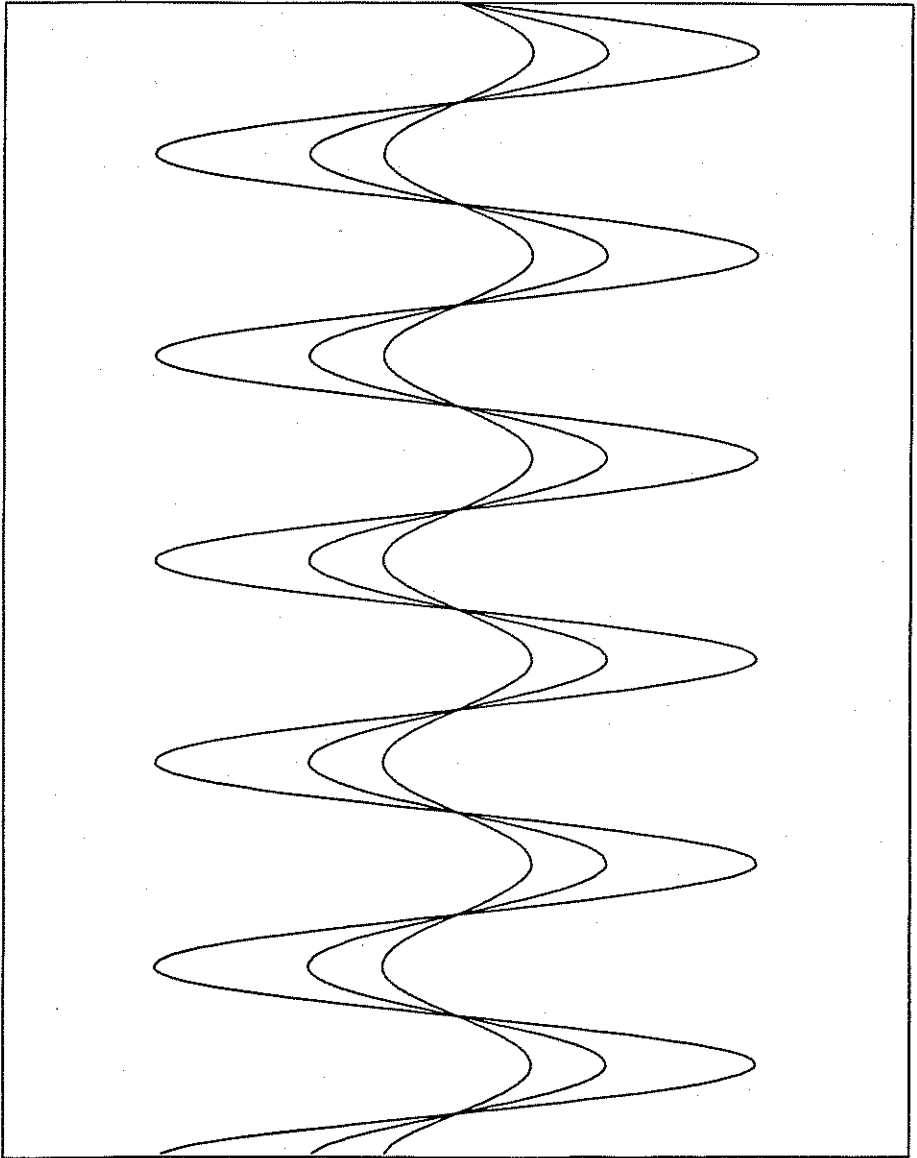


Figure 2: Dissonant Energy



**Figure 1: Harmonious Energy**



time experience, creativity, and differentiation were manifestations of human synergistic development and would be correlates of human field motion. She developed an instrument to measure human field motion in order to examine and support the principle of resonancy. The Human Field Motion Tool (HFMT) was specifically developed to measure motion as an index of human synergistic development and was the first tool reported in the literature that was solely developed as a measure in the Science of Unitary Human Beings. Findings from this study demonstrated a positive correlation between human synergistic development and human field motion.

Gueldner (1986) utilized the Human Field Motion Tool to study the relationship between imposed motion (rocking) and human field motion in elderly individuals living in nursing homes. She hypothesized that there would be a positive relationship between imposed motion and human field motion. She also hypothesized that there would be a positive relationship between perceived human field motion and the state of restedness in these individuals. Gueldner found no significant difference between those individuals who rocked versus those who did not rock; however, those individuals with higher human field motion scores reported feeling more rested. Testing difficulties in this population with Ference's Human Field Motion Tool prompted Gueldner (1993) to develop an alternative measure of motion of energy fields, the Index of Field Energy (IFE), that utilizes a pictorial semantic differential format. Thus visual metaphors are utilized to measure energy and motion of both human and environmental fields (Gueldner, 1993). Ference's HFMT as well as Gueldner's IFE, which attempts to measure energy characteristics of human and environmental fields, may well measure a phenomenon closely related to integrated awareness.

Both Gueldner and Ference studied a manifestation of pattern of the individual. Neither, however, addressed the manner in which patterns blend during mutual process between individuals, or between individuals and their larger environments. As the pattern of motion of an energy field changes, fluctuating in frequency and intensity, it is reasonable to hypothesize that the pattern of integrated awareness will also vary. Further investigation of the relationship between these patterns may prove quite fruitful.

Power. Barrett's (1983/84, 1986) concept of power as the ability to knowingly participate in change presents another related concept. Conceptualizing power within the Science of Unitary Human Beings, she studied the relationship of human field motion and power. Attributes of power include awareness, choices, freedom to act intentionally, and involvement in creating changes. According to Barrett (1983/84), "awareness and freedom to act intentionally may be the knowing which guides participation in choices and involvement in creating changes in one's own field and one's environmental field" (p. 27). Barrett utilized her concept of power to develop The Power-As-Knowing-Participation-in-Change Test (PKPCT). In her investigation of the relationship of human field motion and power, she found a significant correlation between the variables and concluded that the ability to participate knowingly in change increases as human field motion evolves.

Bramlett (1990/1991, 1993) investigated the pattern of change in power in older adults after participating in reminiscence activity. She found significant increases in power over the study period in both control and experimental groups. While reminiscence was not confirmed as a therapeutic modality, Bramlett concluded that power was a dynamic phenomenon, capable of

exhibiting changing patterns.

Both power and integrated awareness incorporate the idea of awareness. Furthermore, both are dynamic and constantly changing as individuals evolve. Power is concerned with the pattern manifestations of individuals or groups. While patterns of power are integral with unitary human field and demonstrate an evolving synchrony with these fields, power is a manifestation of the field and only indirectly reflects the ongoing mutual process of the individual or group and the environment. Integrated awareness is purported to more directly address the mutual process.

Motion and Power. Rapacz (1991/1992) investigated the nature of chronic pain as a manifestation of patterning of human and environmental energy fields. Utilizing Ference's Human Field Motion Tool and Barrett's Power as Knowing Participation in Change Test, Rapacz found that people experiencing chronic pain demonstrated significantly lower human field motion and power than their counterparts who were not experiencing pain. She concluded that individuals with chronic pain have significantly lower frequency patterns than those persons who do not have pain. Thus, Rapacz explored the concepts of both human field motion and power and their relationship to field pattern manifestations. While she investigated the relationship between two field pattern manifestations, Rapacz did not address the relationship between the individual and environmental field patterns.

Mystical/Paranormal Experiences. In an investigation of the principle of helicy, Cowling (1983) studied the relationship of mystical experience, differentiation, and creativity in college students. Cowling conceptualized and operationalized these three variables as characteristics that composed the unitary construct of field pattern. He emphasized that the transcendent nature of mystical experience indicated the diversity of human field pattern. He further described

mystical experience as "behavior phenomenologically described as transcendent perceptual experience" (Cowling, 1983, p.5). He concluded that a relationship did exist between mystical experience, differentiation, and creativity in college students and thus supported the principle of helicy. Cowling (1986) further inferred that mystical experiences are also evidenced in other states which may be labeled as peak experiences, dreaming, meditation and near death experiences. Cowling (1986) emphasized that these experiences may occur in everyday life, and the potential they have for explaining human potential and field patterning have not been fully investigated.

McEvoy (1990) investigated the relationships among the experience of dying, the experience of paranormal events, and creativity in adults. In this study, she hypothesized that adults who are dying will experience more paranormal events and manifest more creativity than those adults who are not dying. She also hypothesized that adults who are dying would manifest an increase in paranormal events and creativity as the dying process proceeds. The findings of this longitudinal study indicated an increase in the incidence of paranormal experiences over time, yet no differences in creativity were seen. Paranormal experience is seen as a correlate of pandimensionality and is based on the principle of integrality.

These phenomena all suggest a process of heightened awareness which is deemed necessary in integrated awareness. Cowling and McEvoy both investigated mystical paranormal experiences as manifestations of individual pattern but did not address the pattern manifestations of mutual process. Integrated awareness is proposed to sometimes be perceived by the individual as having a mystical or paranormal quality reflecting the pattern of the mutual process of individuals and their environments. Thus, integrated

awareness may have the potential to make the pattern inherent in mystical and peak experiences more recognizable.

Empathy. The concept of empathy, a term proposed to be closely related to integrated awareness, was presented by Alligood (1986). She investigated the relationship of creativity, actualization, and empathy in support of the principle of helicy. She postulated that creativity as innovative human field pattern and actualization as increasing diversity of human field pattern are associated with empathy. She defined empathy as "a human field pattern manifestation emerging from the mutual human being-environmental process" (p. 148) and considered it a field pattern manifestation of helicy. Alligood found a positive correlation between creativity and empathy as well as between actualization and empathy.

Thomas (1993), while working as a nurse practitioner to assess health promotion and disease prevention needs of clients, noticed that something unusual and unexplained was happening during her sessions. Both the nurse and the client sensed that the sessions were "life-changing experiences" (p.3) in that a sense of connectedness or continuous mutual process was occurring. In order to examine and delineate the pattern of this phenomenon, which she stated bore resemblance to the concept of empathy, she began a phenomenological investigation to explain why in some cases she felt that she and the client were empathically related and sometimes not. Results suggested that an empathic relationship exists when the nurse centers and focuses her energies with mutual intention to foster the client's well-being. Thomas acknowledged that one encounter occurred in which an empathic relationship existed without the benefit of the nurse focusing her energies. Data also suggested that when the investigator did not focus or center her energies, or the client was experiencing anxiety, the likelihood of

an empathic nurse-client relationship was reduced.

Thomas and Alligood both addressed the concept of empathy within a Rogerian framework. Alligood's (1986) findings would suggest that if a relationship between creativity, a manifestation of human diversity, and empathy exists, then integrated awareness may be mutually patterned with human diversity. Thomas also addressed the relationship between empathy and the nature of the mutual process. However, the pattern manifestations of mutual process remain vague and undefined. The development of the concept "integrated awareness" is an attempt to address this ambiguity.

Field Image. Phillips (1990, 1991) presented the concept of human field image (HFI) and used the word "interconnectedness" (i.e., bonding, attachment, love, couvade) as a manifestation of energy field perspectives. Johnston (1992, 1993a) expanded on the concept of HFI through the development of a scale using metaphors to measure human field image. Johnston (1993b) conceptualized field image as a "manifestation of the human and environmental patterning process which may be expressed as a perception of one's potential and an awareness of one's integrality" (p. 55). While viewing field image as a manifestation of human environmental field process, she interpreted this process in terms of the individual's perception of his or her own potential and integrality. Integrated awareness, which also addresses the pattern of mutual process, addresses the nature of the mutual process itself.

Time Perception. Paletta (1990) investigated the relationship of temporal experience to human time. Temporal experience was defined as "the continuous mutual process of the human field with the movement of events in the envi-

ronmental fields" (p. 240). Time awareness is a human-environmental mutual process which is subjectively perceived as time "racing," time "dragging," or as "timelessness." Temporal and time awareness are a unique blend of rhythmic subjective experience and may vary in the context of change and relationships.

Rawnsley's (1986) early 1977 study of the principle of helicy investigated the relationship between the perception of time and the process of dying. Rawnsley concluded that increasing field complexity, a natural process of evolution, occurs at an accelerated rate during the process of dying and because of this, the perception of the passage of time does not differ significantly from older to younger dying persons. Both perceive the passage of time as occurring at an accelerated rate.

Paletta and Rawnsley both investigated the perception of time, conceptualized as a marker of increasing field complexity. Integrated awareness may reflect the synchronicity of subjective experience (i.e. harmonious, chaotic, erratic) reflected in their conceptualizations of time. However, rather than addressing perception of a specific phenomenon such as time, integrated awareness addresses the actual pattern of the mutual process experienced by the individual.

Wave Pattern Perception. Numerous studies have been conducted within the Rogerian framework in order to investigate mutual process of the human and environmental fields. Most of these studies have reflected the relationship of the human field with light or wave patterns in the environment. McDonald (1986) conducted a study to determine the relationship between visible lightwaves and the experience of pain. She hypothesized that persons who were exposed to higher frequency (blue) visible lightwaves would experience less pain than those persons exposed to lower frequency (red) visible lightwaves. She further hypoth-

esized that the longer exposures to blue lightwaves would yield greater likelihood of pain reduction. She reported that persons exposed to blue light experienced greater relief of pain, thus supporting the hypotheses.

Investigating the relationship between hyperactivity in children and perception of short wavelength light, Malinski (1986) hypothesized that hyperactive children would be able to visually perceive shorter wavelengths of light than their non-hyperactive counterparts and would also express preference for those shorter wavelengths. While noting a trend in the hypothesized direction, Malinski was unable to document statistically significant associations.

McDonald's use of light as wave patterns parallels conceptualization of integrated awareness as the mutual process of wave patterns presented herein. Furthermore, Malinski's propositions regarding perception of wavelengths may be relevant in explicating the various manifestations of integrated awareness.

#### Other Literature

Intuition. Intuition is a phenomenon whereby knowledge is received in an immediate manner, perceived as a whole, and not arrived at through conscious linear processes (Rew, 1988); it allows us to experience the totality and underlying connections of pattern invisible to the senses. Rew has investigated the utility of intuition to guide the decision-making process of nurses. Intuition and integrated awareness share a common theme in that they both involve a higher form of vision and a greater awareness of perception with meaningful intent. The intimate relationship between these phenomena presents a challenge to scholars for further inquiry.

Connected Knowing. Gilligan (1982) and Lyons (1983) used the terms separate and connected to describe two different conceptions or experiences of the self. Separate implies autonomy as in separate



from others. The separate self experiences relationships in terms of reciprocity and mastery over or doing unto others as they have done to you. The connected self experiences relationships as "response to others in their terms" (Lyons, 1983, p. 34). Integrated awareness differs from connected in that connection implies a mutuality with a specific or static phenomenon, whereas mutual process is a dynamic phenomenon. Furthermore, connection infers at least two boundaried beings. Integrated awareness rejects the existence of boundaries and recognizes humans and environment as infinite, consistent with the assumptions underlying the Science of Unitary Human Beings.

Synchronicity. Synchronicity is a descriptive term used by the psychologist, Jung (1973), to describe the link between two events that are connected through their meaning, a link that cannot be explained by cause and effect. Synchronicity requires human participation, for it is a subjective experience in which the person gives meaning to coincidences. "Meaning" differentiates synchronicity from synchronous events (i.e., clocks chiming at the same time, airplanes departing or arriving at the same time). Synchronicity reflects on the subjective experience and subsequent meaning of coincidental events, whereas integrated awareness is focused on the mutual process that occurs during meaningful coincidences.

#### Summary

Integrated awareness implies an abstract sense of connection or mystical transcendence wherein human and environmental energy fields evolve. It may be perceived as a unifying schema of inner peace, serenity, well-being, and power. However, it differs from the discussed concepts in that it addresses the pattern of the mutual process of individual and environment, including both other individuals and natural phenomena such as a sunset or a symphony.

#### **Essential Attributes of Integrated Awareness**

The concept of integrated awareness is an abstruse, complex, and pandimensional phenomenon. Based on a review of the literature and analysis of the concept, the following essential attributes are identified:

1. Authenticity - flows from the subjective experience of authentic power whereby one perceives meaningfulness and purpose in the patterns of one's life.

2. Transcendence - the perceptual nature of phenomena as independent of mere feeling or cognition.

3. Unity - perception of the self as an energy field, mutually exclusive from mind-body dualism and as integral with one's environment.

The following hypothetical cases will illustrate the essential attributes of integrated awareness.

#### Model Case

A student sits in a classroom awaiting the guest speaker's arrival. When the guest speaker begins to lecture, the student's and the speaker's eyes meet. At that moment the student becomes aware that a mystical connection characterized by harmonizing of energy fields is occurring. The student knows that for whatever reason the speaker has become an integral facet in her life. She resists the urge to go to the speaker after the class because she knows the pattern manifestations will emerge. The speaker notices the student and experiences a similar sensation that the student has become integral to her life. The memory and the perceptual meaning of the experience remains with them forever.

The situation demonstrates authenticity, as the student perceives the meaningfulness of the encounter. She is highly aware of the experience and the transcendent nature of the meeting. She perceives a sense of unity and mutual process with the speaker.

#### Borderline Case

Patients who have been triaged are waiting to be brought back to an emergency

treatment area. A nurse steps into the waiting area to call the next patient back. The nurse sees a young woman, who is pale and waxen, sitting in a wheelchair. The nurse immediately goes to her because she senses that something potentially life-threatening is occurring with the young woman. Subsequently, it is discovered that the young woman has a ruptured ectopic pregnancy.

This situation describes intuition, a related concept, rather than integrated awareness. While intuition merged with knowledge and experience contributed to resolution of the situation, these should not be confused with integrated awareness. While awareness is present, the sense of unity and mutuality are absent.

#### Contrary Case

Thirty-seven people are crowded into a train car of a metropolitan area subway. People enter and exit in a continuous stream as the train stops. No one can remember or recall the other people on the train. They traveled in a day dream, unaware of the existence of the others.

In this situation, authenticity is absent so no meaning is perceived. Transcendence is absent, and there is no perceived unity or intent. Therefore, this situation exhibits none of the essential attributes of integrated awareness.

#### Antecedents and Consequences

At first thought, antecedents and consequences might appear to infer the existence of linearity and causality and thus would be incongruent with the Rogerian conceptual system. However, more careful consideration of these terms reveals their potential to describe recognizable patterns within the process of pandimensional sequencing. This sequencing does not necessarily infer linearity, but may explicate the sense of mutual process that integrated awareness is purported to address.

#### Empirical Referents

Empirical referents are "classes or categories of actual phenomena that by their

existence or presence demonstrate the occurrence of the concept itself" (Walker & Avant, 1987, p. 43). Since Rogers first introduced her model in 1970, difficulties have arisen regarding the appropriate methodology for the empirical measurement of unitary constructs. The argument continues among nurse scholars regarding the use of both quantitative and qualitative methodologies and the validity of collecting data by qualitative methods, then quantifying that data to give static meaning to that phenomenon (Carboni, 1992).

Although instruments purporting to measure unitary constructs within the Science of Unitary Human Beings have been developed or are evolving (Barrett, 1986; Carboni, 1992; Ference, 1986; Gueldner, 1993; Johnston, 1993; Paletta, 1990), none of these instruments measure integrated awareness. Phenomenological methodology may prove to be the most useful tool for exploration of the phenomenon of integrated awareness as a human experience. Qualitative exploration of the concept of integrated awareness utilizing phenomenological methodology may provide further insights that could facilitate the future development of appropriate measurement methodologies.

#### **Research and Practice Implications**

Research within the framework of the Science of Unitary Human Beings continues to evolve and expand. More recent research studies have focused on clarifying the abstract conceptual system, further delineating human field patterning, and on therapeutic modalities which may enhance the knowledge and practice of nursing. Carboni (1992) developed an instrument called the Mutual Exploration of the Human Field Environmental Field Relationship Tool which is used to measure the unitary field pattern. The importance of this tool is that it allows for the open expression of human pattern in a holistic context. Butcher and Parker (1988) have explored the use of pleasant guided imagery as a relaxation technique nurses

can utilize to assist patients in coping with stress and anxiety. Therapeutic Touch is a healing technique that dates back for centuries. It was developed for use as a nursing practice modality by Kreiger (1975) and has received increasing attention by nursing researchers (Heidt, 1981; Meehan, 1985; Quinn, 1984, 1989). Heidt (1981) and Quinn (1983) both investigated the relationship between Therapeutic Touch and anxiety and found that subjects experiencing Therapeutic Touch had decreased levels of anxiety. As anxiety is perceived to be a dissonant state, an investigation into the relationship of integrated awareness, Therapeutic Touch, and anxiety may be worthy of consideration. Heidt (1990) has further investigated Therapeutic Touch by conducting a grounded theory analysis of nurses' and patients' experiences of Therapeutic Touch. She identified categories of experience including: opening intent, opening sensitivity, and opening communication. As Therapeutic Touch is based on mutuality of energy fields, the congruence of these categories of experience with integrated awareness may serve as an area for further investigation.

Time perception presents a fruitful area for future research. In an extension of Rawnsley's (1986) work, a relationship between integrated awareness and the perception of the dying process may be worthy of investigation. With the increasing field complexity accompanying the dying process, does the pattern of integrated awareness also change?

Research examining the relationship between motion of energy fields and integrated awareness may also prove beneficial. Also, the relationship between intimacy, a potential contributor to quality of life (Seagraves, Bramlett, Gueldner, Moneyham & Guillory, 1993), and integrated awareness is worthy of investigation. Of course, all research on integrated awareness must first be predicated on further development of the concept through research, both quali-

tative and quantitative, that more fully illuminates the nuances of this evolving concept.

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# TOWARD DEVELOPING A THEORY OF SPIRITUALITY

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## ABSTRACT

*The purposes of this paper are to share work done by the author toward developing and testing a theory of spirituality within Rogers' nursing model and to promote discussion among Rogerian scholars in order to further theory development. Major themes found in the nursing literature are compared with a humanist definition of spirituality and examined for theoretical congruence with Rogers' nursing model. Findings from a national study in which spirituality, measured by the Spiritual Orientation Inventory, was positively correlated with power, measured by the Power as Knowing Participation in Change Tool, in polio survivors who manifested greater spirituality than people who had not experienced a disabling or life-threatening event, are presented using Rogers' model. Rogerian scholars are encouraged to consider spirituality a potential of all human beings and continue to discuss and develop a theory of spirituality that is conceptually consistent with Rogers' dynamic nursing model.*

The purposes of this paper are to provide the reader a brief overview of the nursing literature on spirituality; share work done by the author toward developing and testing a theory of spirituality within Rogers' nursing model; and promote discussion among Rogerian scholars in order to further theory development.

A review of the nursing literature of the past decade reveals a surge of articles about spirituality and its relevance to nursing and health. In a recent article, Florence Nightingale was described as "one of the greatest spiritual figures of the modern era;" a woman who saw "an ultimate purpose to life, who saw a unity beyond apparent divisions...who looked beyond the illusory world for ultimate truth. . . ." (Calabria, 1990, p. 73). Stuart, Deckro, and Mandle (1989, p. 36) wrote that "the roles of

spirituality and health have been interrelated from the earliest of times," and observed that nursing, which developed "to meet the biological, psychosocial, and spiritual needs associated with human illness and suffering" (p. 35), has recently neglected the spiritual dimension. Stoll (1989) related spirituality to nursing in stating that "a person's perception of and experience with the transcendent will in great measure influence how that person views life and copes with life's crises of illness, suffering, and loss" (p. 5). McGlone (1990) suggested that illness in our society is "an opportunity to get in touch with the concerns of our spiritual selves," and that "the path toward health is necessarily a spiritual one" (p. 79).

Spirituality, while not specifically discussed by Rogers, is suggested by her homeodynamic model in which human beings are both unitary and irreducible, continually engaged in mutual process with the environmental field (Rogers, 1990) in a pandimensional universe (Eureka!, 1991). In 1989, a forum of Rogerian scholars initiated a discussion of spirituality within Rogers'

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model (Malinski, 1989; Rapacz, 1989; Reeder, 1989). Reeder chose to use the term mysticism rather than spirituality to avoid the appearance of reductionism. She described the mysticism of Tielhard de Chardin and Hildegard of Bingen as optimistic and dynamic, resonant with Rogers' [pandimensional] worldview. Rapacz, who shared Reeder's concern that the term spirituality could suggest dichotomous thinking, wrote that spiritual matters should be explored within the context of patterning. Malinski (1989) described spirituality as "both the existence and experience of interconnectedness of human and environment" (p. 4), later specifying that "integrality is spirituality and as such incorporates mysticism" (Malinski, 1991, p. 55).

According to Soeken (1989), although "an individual's spiritual dimension is an extremely important aspect of his or her whole being" and appropriate for research (p. 355), most of what has been written about spirituality in nursing are "statements of opinion or vignettes of individual experiences" (p. 356). Empirical studies addressing spirituality and illness have typically used definitions and tools which incorporate religious beliefs and practices. The Spiritual Well Being (SWB) scale, developed by Paloutzian and Ellison (1982) as a measure of spiritual quality of life, combines the dimensions of religious well-being and existential well-being to measure SWB (Ellison, 1983). The recently developed Index of Core Spiritual Experience (INSPIRIT) (Kass, Friedman, Leserman, Zuttermeister, & Benson, 1991) instructs participants to answer questions about their "spiritual or religious beliefs and experiences" and to use their own definition of God when answering the questions (p. 210).

Hungelmann, Kenkel-Rossi, Klassen, and Stollenwerk (1985) identified defining characteristics of spiritual well-being from an 18-month grounded theory study of 31 adults aged 65 to 85. Health status of

participants, who lived in varied settings, ranged from good to terminally ill. Based on their investigation, Hungelmann et al. described spiritual well-being as "a sense of harmonious interconnectedness between self, others/nature, and Ultimate Other which exists throughout and beyond time and space" that is ". . . achieved through a dynamic and integrative growth process that leads to a realization of the ultimate purpose and meaning of life" (p. 152).

### **Defining Spirituality**

The term "spirituality," although widely used, has different meanings according to the contexts of time, place, and worldview. According to Stoll (1989), "descriptions of the spiritual dimension are diverse . . . with little universal consensus" (p. 5). In order for nurses to engage in meaningful dialogue about spirituality, it is necessary to reach consensus on a definition of spirituality. It is also important to clarify the relationship of spirituality to religion. Many authors identify the concept of spirituality with religion or religious practices (Burkhardt, 1989; Emblen & Halstead, 1993), and the terms "spirituality" and "religion" have often been used interchangeably in the nursing literature (Harrison, 1993). Current definitions of spirituality represent an attempt to develop a supra-religious definition which expresses the commonalities of varied religious traditions rather than that which is unique to any individual religious institution or expression (G. Moran, personal communication, Feb. 4, 1991). The perspective of this author is that spirituality does not contradict religion, but is a more inclusive phenomenon. Spirituality, which for some individuals may be nurtured by, related to, or expressed through organized religion, for others is not connected with religious beliefs or affiliation (Elkins, Hedstrom, Hughes, Leaf, & Saunders, 1988).

According to Elkins et al. (1988), developing "an enlarged definition and understanding of spirituality," and recognizing

the "human and universal nature" of spirituality (p. 6), broadens the concept to include both religious and non-religious beliefs and expressions. Elkins et al. described spirituality from a humanistic perspective, synthesizing a definition from the writings of Maslow, Dewey, Frankl, Buber, and others. Viewing spirituality as "a human phenomenon" that "exists, at least potentially, in all persons" (Elkins et al., 1988, p. 8), they defined spirituality as "a way of being and experiencing that comes about through awareness of a transcendent dimension characterized by certain identifiable values in regard to self, others, nature, life, and whatever one considers the Ultimate" (p. 10). Elkins et al. elaborated spirituality as a multidimensional construct with the following nine major dimensions:

1. Transcendent Dimension: Belief in more than that which is seen, that may or may not be belief in God; and belief that personal power is drawn through harmonious contact with this dimension

2. Meaning and Purpose in Life: Deep confidence that one's life has purpose, emerging from a quest for meaning

3. Mission in Life: Sense of responsibility to life; knowing that in "losing one's life" one "finds it"

4. Sacredness of Life: Belief that all life is holy

5. Material Values: Realization that ultimate satisfaction is from spiritual, not material things

6. Altruism: Belief in social justice, and awareness that "no man is an island"

7. Idealism: Commitment to the actualization of positive potential in all aspects of one's life

8. Awareness of the Tragic: Deep awareness of human pain, suffering, and death, and that life has value

9. Fruits of Spirituality: Benefits of spirituality realized in relationships with self, others, nature, and what one perceives as the Ultimate.

The definition of spirituality presented by Elkins et al., and the dimensions which explicate it, encompass the ideas of spirituality found in the nursing literature.

### **Examining a Theory of Spirituality Using Rogers' Model**

For this discussion, the author has collapsed the nine dimensions of spirituality identified by Elkins et al. (1988) into four as follows:

1. Feeling confident that life is meaningful, which includes having a sense of mission in life

2. Having a commitment to the actualization of positive potential in all aspects of life, which includes realizing that spiritual values offer more satisfaction than material ones and that spirituality is integral with one's relationship with self and all else

3. Being aware of the interconnectedness of life, which includes being conscious of the tragic and touched by the pain of others

4. Believing that contact with a transcendent dimension is beneficial, which includes feeling that all of life is sacred.

Themes that appeared frequently in definitions and descriptions of spirituality that are congruent with Rogers' model have been grouped into these four major dimensions which this author suggests are essential to a definition of spirituality to be used in nursing.

The first major manifestation of spirituality is feeling confident that life is meaningful. Rogers (1970) stated, "In the process of evolution, man's search for meaning takes on new dimensions" (p. 93). Elkins et al. (1988) described the spiritual person as "one who has known the quest for meaning and purpose and has emerged . . . with confidence that life is deeply meaningful and that one's own existence has purpose" (p. 11). Others have viewed spirituality as a quest for, or source of, meaning in one's life (Shafranske & Gorsuch, 1983; Stoll, 1989; Stuart et al., 1989). The spiritual person has



been described as having a sense of responsibility to life (Elkins et al., 1988). Frankl (1984), identifying the search for meaning as a basic human need, observed that although it is not necessary for people to suffer to find meaning, suffering may provide the opportunity to grow spiritually. Carson (1989) differentiated spiritual development from religious development, identifying growth in spirituality as a "dynamic process in which an individual becomes increasingly aware of the meaning, purpose, and values in life" (p. 26). Summarizing the nursing literature, Stoll (1989) described spirituality as bringing meaning and purpose to one's life.

The second major manifestation of spirituality is its effect upon an individual and that person's becoming, the commitment "to the actualization of positive potential in all aspects of life" (Elkins et al., 1988, p. 11). Rogers (1990) viewed human beings as energy fields "different from the sum of their parts" (p. 6), actualizing potentials in the process of becoming. Reeder (1989) described "an evolution toward the maximization of all creative potential reflective and aware of itself" (p. 2). C. Rogers (1980) considered the actualizing tendency a characteristic of organic life representing an "underlying flow of movement toward constructive fulfillment of its inherent possibilities" (p. 117). Maslow (1971), who viewed life as an ongoing process of choices, described movement toward self-actualization as making the "growth choice instead of the fear choice" many times (p. 44), and stated that spirituality provides what one can grow toward (Maslow, 1964). Stoll (1989) described spirituality in terms of movement: ebbing and flowing . . . "sometimes in an even flow, sometimes, in trickles, and infrequently in tumultuous 'peak experiences' toward the fulfillment of one's life" (p. 21).

The third major manifestation of spirituality is feeling a sense of interconnectedness with other living things.

According to Rogers (1990), human beings are energy fields integral with environmental fields, engaged in a continuous, mutual process of change. Writing from a Rogerian perspective, Malinski (1991) referred to spirituality as both the existence of and the experience of integrality, which manifests itself as increased awareness of the interconnectedness of people and environment; and Reeder (1989) described an "integral view of human life and the cosmos" (p. 2). A sense of interconnectedness may also be manifest as commitment to altruistic love and action (Elkins et al., 1988), and love and forgiveness toward others (Hungelmann et al., 1985; Stoll, 1989). Elkins et al. identified altruism as an expression of spirituality, describing it as being touched by the pain and suffering of others, and having a strong sense of social justice. Banks, Poehler and Russell (1984) reported that a "sense of selflessness and a feeling for others; a willingness to do more for others than for yourself" (p. 17) is a very important component of the spiritual dimension. Carson (1989) referred to spiritual development as including service, while others have associated spirituality with love, caring, wisdom, imagination, forgiveness, and compassion, all qualities which are components of caring for others (Dossey, 1989; Krieger, 1981; Reed, 1992; Rew, 1989; Stuart et al., 1989).

The fourth major manifestation of spirituality is a sense of beneficial connectedness with a transcendent dimension or Being. Rogers, who speculated that human field patterning continues after death (Malinski, 1986, p. 14), described reality as "pandimensional; an infinite domain without limit" (Eureka!, 1991). Elkins et al. (1988) noted that, although the content of belief about life's transcendent dimension will vary from a psychological view of "a natural extension of the conscious self into the regions of the unconscious . . ." to faith in a personal God, contact with this unseen

world is always perceived as beneficial (p. 10). Elkins et al. observed that some people experience this dimension through peak experiences. Spirituality has also been described as a trusting or harmonious relationship with a transcendent dimension or Ultimate Other (Hungelmann et al., 1985; Stoll, 1989), and as including a "deep sense of belonging, of wholeness, of connectedness, and of openness to the infinite" (Shafranske & Gorsuch, 1984, p. 245). Donnelly and Sutterley (1989) stated that to be spiritual is to be "connected--to the inner self, to others, or to a transcendent being or energy" (p. vi). The National Interfaith Coalition on Aging (1975) echoed these themes, describing spirituality as the relationship with self, others, and "the Ultimate Other which exists throughout and beyond time and space".

#### **Testing a Theory of Spirituality Using Rogers' Model**

Theory is derived within nursing models, then tested through research. After concluding that Elkins et al.'s definition of spirituality is conceptually congruent with Rogers' model, the author conducted a descriptive study of the relationship of spirituality to power, a theory derived by Barrett (1983) within Rogers' model (Smith, 1992). Manifestations of power and spirituality, conceptualized as indicators of human field change, were compared in people who had survived polio and in people who had not had polio or any other disabling or life-threatening illness.

As described by Rogers (1990), people are continuously engaged with the environment in the mutual process of change, actualizing some of an infinite number of potentials in the process of becoming. Barrett (1983) developed a theory of power from Rogers' model that people are able to actively participate in the process of change by choosing which potentials to actualize. Elkins et al. (1988) described highly spiritual people as finding meaning in life, experiencing them-

selves as interconnected with other living things, including a transcendent dimension or Being, and committed to actualizing positive potentials in life. The investigator hypothesized that power, defined as "the capacity to participate knowingly in the nature of change characterizing the continuous patterning of the human and environmental fields" (Barrett, 1983, p. 50), would be positively correlated with spirituality, an indicator of pattern change defined as "a way of being and experiencing that comes about through awareness of a transcendent dimension characterized by certain identifiable values in regard to self, others, nature, life, and whatever one considers to be the Ultimate" (Elkins et al., 1988, p. 10).

Measurement instruments used were Elkins' (1988) Spiritual Orientation Inventory (SOI), an 85-item inventory developed to better understand spirituality in people independent of affiliation with a traditional religion (Cronbach's  $\alpha = .98$ ), and Barrett's (1987) Power as Knowing Participation in Change Tool (PKPCT) (Cronbach's  $\alpha = .97$ ). Power and spirituality were found to be positively related ( $r = .34$ ,  $p < .005$ ), explaining 12% of the variance in a national sample of men and women born prior to 1960 who had achieved a minimum of a high school education ( $N = 252$ ), . Effect size was medium, and power  $> .80$ . The statistically significant correlation between the constructs of power and spirituality supports Barrett's (1983) theory that people, who have the capacity to knowingly participate in change, also have the ability to change the nature of their participation. The findings also support this author's contention that as people grow more aware of a transcendent dimension or Being, the nature of their participation increasingly manifests in the actualization of potentials congruent with identifiable spiritual values. The relationship identified between power and spirituality in this study offers beginning empirical support for a theory of spirituality in

Rogers' nursing model.

The idea that spirituality is related to health was also tested in this study, with manifestations of spirituality and power in polio survivors ( $n = 172$ ) compared with those of people who had not had polio or a similar or life-threatening illness ( $n = 80$ ) (Smith, 1992). Various health-related factors have been cited in the literature as contributing to spirituality, including adversity (Maslow, 1971), crisis (Hall, 1986; Harris, 1989), chronic illness (O'Brien, 1982), terminal illness (Hungelmann et al., 1985; Reed, 1987), and disabling diseases including polio (Bozarth, 1987; Roche, 1989; Vash, 1981). Rogers (1970) wrote, "The all-too-common perception of [human beings] as predominantly subjected to multiple negative environmental influences with pathological outcomes denies [their] unity with nature and [their] evolutionary becoming" (p. 85). Harris (1989) related an awakening of spirituality to "marker" events (p. 13), crises in which deepened awareness is associated with increased vulnerability, and Frankl (1984) observed that difficult situations often provide a person with ". . . the opportunity to grow spiritually beyond himself" (p. 93).

According to Rogers (1970, 1990), change is characterized by increasing diversity, and field patterns that are diverse evolve more rapidly than those that are less diverse. Polio survivors are people who have participated in change through rehabilitation and manifested increasing diversity by finding innovative and creative ways to live meaningful lives (Laurie, Headley, & Mudrovic, 1989). Some polio survivors have been described as transcending disability (Vash, 1981) and showing interest in spirituality related to the polio experience (Bozarth, 1987). The investigator hypothesized that polio survivors, selected as exemplars of people who have survived an unexpected, life-threatening event, would manifest greater power and spirituality than

people who had not had polio or any other life-threatening experience. Data showed that the two groups were statistically similar in power ( $t = .44$ ,  $df = 250$ ,  $p = .33$ ), and that polio survivors manifested significantly greater spirituality ( $t = 3.79$ ,  $df = 250$ ,  $p = .001$ ).

The finding that polio survivors manifest greater spirituality than people who have not had polio supports the idea that for these participants polio was a "difficult situation," "typically perceived as negative"; a "marker event" related to shifting patterns in life associated with increased awareness and changed perspectives. The statistically significant relationship between surviving polio and manifesting greater spirituality offers further empirical support for a beginning theory of spirituality within Rogers' nursing model.

#### Discussion

The building blocks of open systems, human and environmental energy fields, openness, pattern, and pandimensionality, form the background for theories derived and tested within Rogers' nursing model. Rogers' (1990) three homeodynamic principles postulate the nature of change in human and environmental fields: integrality, "continuous, mutual process"; resonancy, "continuous change from lower to higher frequency wave patterns"; and helicy, "continuous innovative, unpredictable increasing diversity" (p. 8). Theories, such as the developing theory of spirituality, are derived from Rogers' model as a whole. Malinski (1991) proposed that within Rogers' model, spirituality is the existence and the experience of integrality, "the continuous mutual process of human and environmental fields, whereby person and environment are a unitary whole" (p. 55). Manifestations of integrality/spirituality proposed by Malinski (1991) include reverence for life, compassion, a commitment to heal, and the "unfolding of human potential" (p. 58), which are comparable to Elkins et al.'s (1988) con-

cepts of sacredness of life, altruism, and idealism. This author believes that spirituality derives from Rogers' nursing model as a whole, and suggests expansion of Malinski's definition to include spirituality as helicy, choosing to actualize potentials that enhance what is perceived as beneficial interconnectedness with all life including a transcendent dimension or Being; and spirituality as resonancy, developing higher frequency patterning manifested as greater awareness of pandimensionality.

Within Rogers' dynamic model, Rogerian scholars knowingly participate in the process of change, engaging in mutual process to create new theories and visions of the conceptual framework. Beliefs and assumptions inherent within Rogers' model have implications for sharing the concept of spirituality, which is of interest not only to nursing, but also to many other disciplines. The author suggests that it is time to explore the issue that "... theories deriving from a Science of Unitary Human Beings are specific to nursing just as theories deriving from biology are specific to biological phenomena . . . ." (Rogers, 1990, p. 6), which seems inconsistent with a universe of open systems. Perhaps the assumption of separateness of scientific disciplines, a legacy of modern Western science, is theoretically inconsistent with Rogers' science as it evolves; and it is time to consider adopting the view of complementary science based on "an ontological assumption of oneness, wholeness, interconnectedness of everything. . ." (Harman, 1990, p. 8).

### Conclusion

The concept of spirituality as a way of being or experiencing that can exist independent of religion has not previously been studied in nursing, nor has a theory of spirituality previously been studied using Rogers' model. Elkins et al.'s (1988) humanist conceptualization of spirituality has been compared with the nursing literature and with Rogers' nursing model. Examples

of conceptual congruence between Rogers' model and Elkins et al.'s definition of spirituality include the perception that human beings are continually evolving and seeking meaning (Elkins, 1988; Maslow, 1964; Rogers, 1970); engaging in continual, mutual process with other living things including a transcendent dimension or Being (Elkins et al., 1988; Rogers, 1990); and actualizing potentials in the process of becoming (C. Rogers, 1980; Rogers, 1970) which in Elkins et al.'s definition of spirituality is described as having a commitment to actualize potentials valued as positive in life.

Empirical support has been demonstrated for a positive relationship between spirituality and power. This investigator suggests that spirituality grows through continual, mutual process when individuals make choices to actualize potentials which reflect a sense of meaning in life, interconnectedness with all living things, and awareness of a transcendent dimension or Being.

This work is offered as a stimulus toward a dialogue among Rogerian scholars. Rogerian scholars are encouraged to consider spirituality as a human potential, compare the perspectives of Western spirituality with those of Eastern philosophies and Native American traditions, and engage in the process of deriving a theory of spirituality that is wholly consistent with Rogers' nursing model.

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## EMERGING SCHOLARS COLUMN

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### The River Runs Through It...A Rogerian Analogy

Martha Rogers' earliest work used the analogy of a "slinky" to help clarify and crystalize her conceptual system. The image of the "slinky" was used as a way to visualize the evolutionary pattern of humans as they move through time (Rogers, 1970). Rogers did not intend for the "slinky" to be a perfect representation of the human experience, but hoped that it might enable nurses to perceive humans within a broader perspective.

In her later works, Rogers described each human field as constantly evolving or becoming, in continuous mutual process with the environmental field, which is also evolving simultaneously (Rogers, 1990). Viewed in this way, I believe the human life process is much more pandimensional than can be illustrated using a "slinky." The process is one of continuous sharing of energy as unitary humans move in a pandimensional, rhythmical pattern in intimate concert with the earth (environment). Along this line of thought, I would offer a more dynamic and encompassing alternative analogy, that of a new river winding its course through the ecological system known as earth. The river and the earth evolve together; as one changes so does the other.

At times the movement of the water is swift and the current strong. Other times it appears to be slow, almost stagnant; yet, there is constant motion beneath the surface, perhaps unseen from above. During a drought, the water may seem to disappear

completely, yet the patterned groove of the river remains. During a flood, the patterns may seem undefined, but are once again revealed as the water recedes. At times the water is powerful, carving its way through the earth; at other times the earth may be unyielding, thrusting the water in a different direction. The direction it will take is unpredictable, but it will continue to flow somewhere.

As a pediatric flight nurse, my practice often involves the transport of critically ill neonates by helicopter. I am struck with the similarity between the river analogy and the tiny human field in aeromedical transport winding its way among and through the health care environment. It is important that the nurse understand and take into account the disharmony that may occur within the mutual process of this fragile neonatal field and the noisy, jerky, aeromedical transport environment.

The critical physiologic field manifestations of the neonate make him or her more sensitive to conditions within the environment. As in the river analogy, the neonate has a limited ability to change its course. Accordingly, the nurse acts on behalf of the infant to pattern the environment in a way that enhances harmony within the neonate's mutual process.

Unpredictable changes in altitude and temperature in the environmental field may be associated with unfavorable changes in the neonatal field as manifested by cyanosis, bradycardia and hypotension. Assisted by the transport isolette, the nurse strives to minimize unnecessary disruption of the neonate's mutual field process. As part of the environmental field, the nurse is challenged to explore innovative modalities such as stroking or swaddling to assist the neonate to find harmony within his or her unfamiliar environmental field. In this way, the nurse's knowing participation (Barrett, 1988) facilitates harmony within the mutual process of the neonatal and environmental

fields.

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## CONTROVERSIES COLUMN

In the first issue of *Visions* Dr. Susan K. Leddy offered a commentary and critique on Rogerian nursing science in this column. She offered a beginning reconceptualization labeled the Human Energy Systems Model. In this column Drs. Fran Reeder and Barbara Sarter offer their critiques of Dr. Leddy's ideas, followed by Dr. Leddy's response.

### Fran Reeder, RN;PhD;CNM

I read with great interest Susan Leddy's recent commentary and critique in the Controversies Column of the Premiere issue (1993) of *Visions*. She has clearly expressed the frustration felt by many who attempt to understand the language of The Science of Unitary Human Beings and subsequently quoted me in her efforts to develop "an original `imaginative, creative synthesis of facts and ideas`" (Reeder, 1993, p.17). This decision is a path toward greener pastures that promises "concrete definitions and relationships among concepts, and the derivation of testable theories for an ultimate goal of usefulness in practice" (Leddy, 1993, pp.56-57).

I applaud Leddy's efforts to reconceptualize Rogers' principle of integrality "with the aim of integrating emerging wholistic science with human science" (Leddy, 1993, p.56) in light of the current trend in post-modern deconstructionism. However, I would like to challenge Leddy's (1993) claim to have remained "philosophically compatible with Rogers' organismic worldview" (p. 56).

The first move Leddy makes away from philosophical compatibility is to ignore the irreducible, indivisible, pandimensional



nature of the human/environmental energy fields, a domain without spatial or temporal attributes. Such a worldview, characteristic of basic research in Rogerian science, does not logically lead to "concrete definitions and relationships," especially not as a starting point, if compatibility with a Rogerian worldview is desired in the development of a nursing science model, whether organismic or not (Reeder, 1984). It is true difficulty is experienced in learning and using the homeodynamic principles of Rogerian science, but I do not think this experience differs from learning how to conceptualize and use the principles basic to other sciences. However, working within applied science is another matter!

I think applied science is the realm Dr. Leddy would find most relevant for making claims of compatibility between her proposed Human Energy Systems Model and Rogerian science. While remaining consistent with the nature of change expressed in the principles of homeodynamics, specifically integrality, focus could then be given to the *manifestations* of unitary human beings which reveal pattern. Manifestations are correlates of change recognizable in the everyday world (Cowling, 1986). Manifestations nonetheless are "seen" through a way of knowing not limited to the five sense perceptions of the world, common to the mechanistic, entropic worldview. Actually seeing manifestations of pattern is not as common as one would think because most people are not aware of the influence mechanistic thinking has on their daily lives. Thus paradoxes frequently are taken for granted and remain unexplained. If Leddy chose an applied research approach within Rogerian science concrete definitions and relationships could logically express correlates of change (manifestations of pattern), for example, between a mother and fetus, while sustaining compatibility at the philosophical level with a negentropic, pandimensional worldview. The possibility of expressing the

nature of *change* according to the principles of homeodynamics remains necessary as a criterion of evaluation. Inconsistencies and consistencies with this science would both be explored. All manifestations (correlates of change) could then be used to challenge the principle of integrality (mutual process) within Rogerian science. The ultimate goal of synthesis (rather than analysis) would be to recognize the patterning change unfolding through manifestations of the human/environmental energy field process. Knowing participation is a pandimensional way of knowing, a grasp of reality commensurate with Rogerian science and includes but goes beyond perception and awareness of the world through the five senses to include imagination, intuition, dreaming, memory, experiences of paranormal phenomena, and any evolutionary capacity of knowing the world yet to be discovered.

I encourage Dr. Leddy in her genuine efforts to clarify the principles of this nursing science and to join others striving to foster "scholarship of integration and scholarship of application" (Boyer, 1990), specifically as the art of Rogerian science increases relevance and usefulness for the well-being of all people.

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I congratulate Dr. Leddy for raising several important questions related to the principle of integrality. These are questions often asked by students of Rogerian science. My response will 1) attempt to answer her questions from a Rogerian perspective; 2) comment briefly on Dr. Leddy's "reconceptualization" of the principle of integrality.

The idea that "pattern is perceived as a single wave" implies that the field is unitary, and its pattern is apprehended as a whole rather than as a collection of parts. Dr. Leddy's own explanation of pattern as a single wave is fairly accurate. She asks, then, so what? This conception is certainly relevant to nursing assessment, which typically breaks down the person into numerous aspects or pieces before re-assembling him or her into a list of nursing diagnoses. Rogerian assessment, on the other hand, will approach and describe the person as a whole. The same implication holds for nursing therapeutics - the person will be treated as a whole rather than as a collection of separate problems. The overall pattern is the focus of care.

Dr. Leddy next asks if fields are separable or integral. The principle of integrality maintains that boundaries which separate fields are imaginary. Pattern does not *separate* fields, but it does *distinguish* one field from another. So, fields are integral but are distinguished by pattern. Related to this point is the question whether the energy field is a fundamental unit (i.e., an entity) or only a unifying concept. This is an interesting example of the philosophical debate between idealism and realism. Subjective idealists maintain that only ideas - or concepts - are real, that all reality consists of ideas alone. Realists assert that there are

entities that exist independently of the mind's ideas and concepts. My question is, are the two descriptions of energy fields necessarily incompatible? Cannot energy fields be both "real" entities and yet also serve as unifying concepts? The objective idealist would be comfortable with this reconciliation, based on the truth that we always describe reality through the use of concepts.

What then is the person? Of course, Rogers says that the person is a human energy field. But I understand that Dr. Leddy - and many others - want more than this. If we are asking where is the *individual* person, or the self, in Rogerian science, I would answer by saying it is the field. Each field is unique. Even though it is an abstraction in the sense that it cannot be directly perceived, it is apprehended through its manifestations of pattern. And even though pattern is constantly changing, the field, as the unique unifying force underlying all change, remains recognizable as a distinct person. Perhaps with accelerating change and rapidly increasing diversity, we may need to develop new ways of maintaining personhood, if we so choose.

Finally, I would like to caution Dr. Leddy on attempting to reconceptualize the principle of integrality. The model she has created should be recognized and critiqued on its own merit, not as a modification of Rogerian science. I do not believe that it is philosophically compatible with Rogers' worldview. By creating a human energy system separate from the environment, the principle of integrality has been violated, not simply reconceptualized.

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## Susan Kun Leddy, RN;PhD

The responses by Barbara Sarter and Fran Reeder to my commentary in the 1993 *Visions* have stimulated my thinking. I welcome the opportunity to continue the dialogue on three broad issues: clarification of Rogers' principle of integrality, my ongoing model "reconceptualization," and the "usefulness" of a conceptual model for scholars and practitioners.

Sarter's representation of integral fields as *distinguishable* (by pattern) helps me to understand how there can be human *and* environmental fields without their being separate (having boundaries). Bohm (1990) proposes the notion of "participation rather than interaction," which also helps me to conceptualize integrality.

However, I question if Sarter's "reconciliation" of field as both real and a unifying concept is helpful. Conceptualizing the field as a fundamental unit (e.g., a *thing* having actual existence) results in frustration from inability to describe the field in observable and/or measurable terms. For me, it is meaningful to think of field solely as a unifying concept within what Bohm (1990) calls "quantum wholeness." I've theorized that the whole (e.g., the universe) is characterized not by material "units," but "only" by dynamically transforming energy. As a constantly changing potential (a "unifying concept"), energy is not a measurable quantity. Energy transformations, on the other hand, can be experienced, described, and potentially measured. Since humans are integral with the universe, they participate in the web of interconnected energy transformation. I believe this theoretical notion is consistent with Rogers' concept of energy fields and her principle of integrality.

In another example, confusion engendered by attempting to view Rogerian concepts as "real," is resolved by Sarter's explanation of "perception of pattern as a

single wave" as pattern of a unitary whole being apprehended as a whole rather than as a collection of parts. I realize that I have been regarding the "single wave" as a *thing*, a measurable wave, particularly given the description of the principle of resonancy as "manifesting continuous change from lower-frequency longer wave patterns to higher-frequency, shorter wave patterns" (Rogers, 1980, p. 333). Sarter's explanation works for me if "wave" is viewed solely as a unifying concept. As a unifying concept, "wave frequency" can be operationalized through observable/measurable correlates. The implications of appraisal and therapeutics addressed to (re)patterning of the unitary person are certainly relevant for practice.

My commentary indicated that I consider my ongoing conceptual model building to be "philosophically compatible with her organismic worldview, but substantively different from Rogers' work" (Leddy, 1993). Both Sarter and Reeder interpreted that statement as attempting to reconceptualize integrality. In fact, I believe that my work is both consistent with Rogers' assumptions and with the principle of integrality, and also a creative extension through the explication of additional concepts and interrelationships. My suggestion that humans are unitary, self organized, and conscious does not necessarily mean that I am "ignoring the irreducible, indivisible, pandimensional nature of the human/environmental energy fields, a domain without spatial or temporal attributes" as Reeder asserted. However, I agree with Sarter that my model "should be recognized and critiqued on its own merit...."

I agree with Reeder's encouragement of applied science within Rogerian principles. Unless we are able to broaden the use of the Science of Unitary Human Beings in the development and application of knowledge, Rogerian science will be relegated to a few "way out" and/or esoteric scholars. I would encourage more col-

leagues to propose links between Rogerian principles and testable propositions. I still strongly believe that it is essential that the meaning of principles be explicated, and that we strive for language that clarifies and makes concepts more understandable. Rawnsley (1993, p. 2) states that "increasing tolerance for those things still vaguely apprehended rather than definitively agreed upon is a necessary condition for continued progress in discovery." As I struggle with clarifying my own ambiguity, it is enormously gratifying to learn from collegial dialogue!

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## IMAGINATION COLUMN

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### Once upon a time. . .

Time is a concept that holds  
Contemporary humankind spellbound,  
Fascinating poets, musicians, athletes,  
Physicists, mathematicians, and managers  
alike.

Ancient civilizations marked time  
By shadows cast on a sundial,  
Sand falling through hourglasses,  
And the Aztec calendar.

Later time was marked  
By the ticking and chimes of clocks,  
And grocery store calendars,  
Hung on the walls of country kitchens.

Now time is marked with remarkable  
precision  
By silent blinking green or red digital  
numbers,  
Atop public buildings, on dashboards of  
cars, and  
On even the smallest wrist of the civilized  
world,  
Punctuated by irritating buzzers,  
And by computer generated calendars,  
Marking time in nanoseconds.

But precise measures of time elude  
Even the most modern timepieces,  
Requiring an adjustment every four years,  
Creating a bonus day in February each  
Leap Year.

Time marches on, flies, races,  
Stands still, drags, slips away,  
And sometimes runs out.

Will tell,  
Waits for no one,  
Passes some people by,  
Is sometimes on our side,  
Heals all wounds,  
Is of the essence, and  
Unfolds to become the future.

A scantily clad baby  
Replaces an old and exiting Father Time  
Every New Year's Eve,  
Amid strains of Auld Lang Syne,  
Sung by crowds at Times Square,  
Symbolic of time beginning anew...  
A fresh start.

Children are taught to "tell time,"  
Like tying their shoes before Velcro,  
And learn that 2 times 4 = 8 while 2  
times 0 = 0.  
Athletes keep time, beat time,  
Take time outs, and use up time.  
The business world, organized around  
Bankers' hours, office hours, after hours,  
Work time, break time, turnaround time,  
down time,  
Sick time, missed time, leave time, and  
timelines,  
Reminds us that time is money,  
Employees punch clocks to validate their  
time.  
Overtime makes both business persons  
and athletes nervous.

Persons deprived of the usual markers of  
time  
May become disoriented.  
Prisoners of war  
Make notches on the window sill  
To keep track of time passing.  
We know intuitively when it is  
Time to take bread out of the oven,  
Go to the grocery store, or  
Get a new car.

Politely, we query...  
Pardon me, do you have the time?

Do you have time to...?  
Do you remember the time...?  
What does she do with her time?

A critical element of social gatherings,  
Time implies deadlines...  
Time to get started,  
On time, in time,  
Out of time, time's up.  
Someone may even call time,  
And millions of Americans strive to make  
The Publishers' Sweepstakes deadline.

Use of time commands considerable social  
note.  
Perceived mismanagement of time evokes  
reprimand.  
Late is rude; tardy is irresponsible.  
We feel smug when we are on time...  
Especially if someone else is not.  
Respecting an illusion of power,  
Common people try not to keep prominent  
people waiting.  
There is a right time,  
And most especially a wrong time.  
Approving nods laud  
The person who is right on time  
Planes leave persons who are not,  
Or give their seat to someone else.  
Ticket holders who are not on time  
For expensive plays may not be seated.  
Preachers admonish parishners  
For not getting to church on time.

We hear...  
Time well spent, or used wisely,  
Just in the nick of time,  
If only we had more time,  
Time and time again, time after time,  
A sense of time, in the fullness of time,  
A waste of time, a matter of time.  
An earlier time, from another time,  
Frozen in time, a time for all things...  
'Til the end of time.

Time lapse, time warp  
Time share, time zone

Time to leave; time to sleep; time to eat.  
Nap time, lunch time, supper time, tea  
time,  
Quarter time, half time, and  
Three-quarter time, to waltz by.  
Daylight saving time...  
Born of our wish for more light time.  
Life time, free time, spare time, no time.  
The first time, the last time,  
*This* time, every time.  
Happy times, best times, sad times, tough  
times, worst times.  
Night time, daytime, winter time, and  
summer time,  
Each bringing to mind distinctive clothing  
and activities.

We waste time, mark time, do time,  
Save, spend, or donate time,  
Keep and guard time,  
Buy and borrow time,  
Fill and find time,  
Estimate and misjudge time,  
Compete for time, race against time,  
Move through time, make time,  
Work against or with time,  
Have time on our hands,  
Lose track of time,  
And sometimes we kill time...  
As if we could kill time without injuring  
eternity!,  
Muses Henry David Thoreau.

Time is the stuff of the ages.  
Awareness of time is the medium by  
which we experience Life.  
We are not separate from time, but intrinsic  
with it.  
We are never out of time; there is always  
time.  
Markers of time are only tools, not absolutes,  
And so are nothing more than artificial  
attributes.  
So how can we say that anyone is late?  
Or use time as a standard by which to  
judge another's worth?

We have only the present moment;  
Lest we be held slave to clock time,  
Let us instead embrace time  
As our precious opportunity  
To know harmony within the universe.  
We must be careful not to miss anything  
important  
Trying to be on time.

The author acknowledges inspirational  
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## BOOK REVIEW

*MARTHA E. ROGERS: HER LIFE AND HER WORK* (1994)  
BY VIOLET M. MALINSKI AND ELIZABETH ANN MANHART BARRETT  
PHILADELPHIA: DAVIS

Rosemarie Rizzo Parse, RN; PhD; FAAN

*Martha E. Rogers: Her Life and Her Work* is a unique tribute to the nurse scholar *par excellence* of the 20th century and beyond. That this book, four years in gestation, was born shortly after the death of Martha Rogers is indeed a synchronous occurrence. With the nursing world stirred by her transformation to another realm of the universe, this timely compendium offers the reader an opportunity to journey through nursing's evolution from 1952 to the present as Martha Rogers' cocreated it. The first section of the book gives the reader a glimpse of Rogers' through family recollections, a life history, and a general perspective of her early views. These enlightening first chapters provide a vivid context for those that follow. In the subsequent chapters, the editors present many of Rogers' unpublished and published papers, some untitled works, her editorials from the 1963-1965 journal, *Nursing Science*, articles from the SAIN Newsletter, several contributions from her 1970 work, *An Introduction to the Theoretical Basis of Nursing*, and papers written by others to commemorate her 75th birthday.

The editors, with cogent comments, lead the reader into the various sections, Education and Research, Professional and Political Issues, and Nursing Science: Evolution of the Science of Unitary Human Beings. Of particular note in the editorials and in the untitled unpublished works is the substantive crisp direct language, so characteristic of Rogers. These works, when examined with the published articles and chapters, clearly show the rich and consistent contributions Rogers made throughout her life. From the beginning of her professional life, Rogers saw nursing as a science and an autonomous profession. She wrote and spoke about her views with great conviction in every available forum. It is important to be cognizant of the year in which Rogers wrote each chapter in order to fully appreciate her undaunted courage in forging the ideas.

The sections of the book are juxtaposed in a deliberate chronology to move the reader through the work in documentary-like fashion creating a picture of Rogers and nursing in her own words. For example, the evolution of her thinking with regard to the Science of Unitary Human Beings is shown through the various subtle changes in language in her works over time. The chapters authored by Malinski and Barrett and the foreword by Phillips are clear, substantive, and lovingly written, reflecting the esteem with which they hold Rogers. Perhaps there could have been more of an editorial introduction to the chapters (31, 32, and 33) on licensure for nursing practice and a more explicit discussion of Rogers' role in drafting the landmark comments.

The book is exquisitely aesthetic in a purple textured binding with imprinting in silver—a worthy package for the gems inside. Purple, at the high frequency end of the spectrum, was Rogers' signature color. Her 1970 work and the several books on her work by others

are all packaged in some shade of purple.

Just as Nightingale's *Notes on Nursing*, this book should be required reading for all students in baccalaureate and higher degree programs to provide them with an opportunity to understand Rogers' brilliant unmatched contributions to the evolution of nursing as a science and an art. The work brings alive the persistent struggle of one powerful, adventurous woman in her journey to advance nursing as a learned profession and scientific discipline.

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## Announcement

The Society of Rogerian Scholars Press is pleased to announce the publication of its first book, *Martha E. Rogers: 80 Years of Excellence*, Edited by Elizabeth Ann Manhart Barrett, RN;PhD;FAAN, and Violet Malinski, RN;PhD.

This paperbound book contains a number of photographs of Dr. Rogers and her family as well as reminiscences and recollections contributed by many of her colleagues.

Proceeds from the sale of this book will be used to further the work of the Society of Rogerian Scholars, Inc. The price of the book is \$15.00 plus \$2.50 for postage and handling for the USA and Canada and \$5.00 International. Please make your check payable to The Society of Rogerian Scholars (U.S. Funds only), and send to either:

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A limited number of the first issue of *Visions* are available at \$15.00 a copy plus \$2.50 postage and handling (\$5.00 international).

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