

# Visions

[www.Energy-Enigma.com](http://www.Energy-Enigma.com)

See Page 2

*Infinite Potentials*

**The Journal of Rogerian Nursing Science**

# Visions: The Journal of Rogerian Nursing Science

Volume 8 Number 1 2000

## Table of Contents

Internet News	2
Guidelines For Authors	3
Review Panel	4
Library Subscriptions	4
Editorial	5
Sheila Cheema, RN;PhD	
Violet Malinski, RN;PhD	
Perception Of Time, Sleep Patterns And Activity In Senior Citizens: A Test of A Rogerian Theory of Aging	6
Martha Raile Alligood, RN;PhD	
Sandra L. McGuire, RN;EdD	
Speculations On The Unpredictable Future Of the Science of Unitary Human Beings	15
Elizabeth Ann Manhart Barrett, RN;PhD;FAAN	
Enjoy Your Flight: Health In The New Millennium	26
Rosemarie Rizzo Parse, RN;PhD	
The Time Metaphor Test Re-Visited: Implications For Rogerian Research	32
Juanita Watson, RN;PhD	
Claire M. Sloyan, RN;MS,NPC	
Joffre E. Robalino, RN;BSN	
Book Review Column	46
<i>Kitchen Table Wisdom: Stories That Heal</i>	
Pat Christensen, RN;PhD	
Guest Book Review	48
<i>The Enigma Of Energy: Where Science And Religion Converge</i>	
Julie Anderson Schorr, RN;PhD	
Controversies Column	50
Critical Theory and Rogerian Science: Incommensurable Or Reconcilable	
Howard K. Butcher, RN;PhD	
Human-Environmental Field Patterning Practice Column	58
Group Field Work: Lions And Tigers And Bears	
Marcia Anderson, RN;PhD	

## EXECUTIVE EDITOR

Sheila Cheema, RN;PhD

## EDITOR

Violet M. Malinski, RN;PhD

## EDITORIAL BOARD

Elizabeth A.M.Barrett, RN;PhD;FAAN

Sheila Cheema, RN;PhD

Violet M. Malinski, RN;PhD

Thérèse Connell Meehan, RN;PhD

John R. Phillips, RN;PhD

W. Richard Cowling III, RN;PhD

## COLUMN EDITORS

Imagination

Howard Karl Butcher, RN;PhD,CS

Book Review

Pat Christensen, RN;PhD

Controversies

Effie Hanchett, RN;PhD

Human-Environmental Field Patterning

Practice Column

Violet Malinski, RN;PhD

## SUBSCRIPTION INFORMATION

*Visions: The Journal of Rogerian  
Nursing Science* is a peer-reviewed

publication of the Society of  
Rogerian Scholars, Inc., an  
international organization.

Subscription to the journal is  
included in the yearly membership  
dues. Single issues are \$15.

The Society of Rogerian Scholars  
Canal Street Station

P.O. Box 1195

New York, NY 10013-0867

© 2000 Society of Rogerian

Scholars, Inc.

All rights reserved.

ISSN 1072-4532

Indexed in CINAHL

## Table of Contents

Commentary On Group "Field" Work: Lions And Tigers And Bears Mary Anne Hanley, RN;MA	66
Imagination Column Tracey's Story And The Postmodern Literary Poetics Of Experience: Developing A New Research Methodology For Rogerian Science Francis C. Biley, RN;PhD	68
The Martha E. Rogers Collection Jacqueline Fawcett, RN;PhD;FAAN	74
Rogerians in the News	75
Call For Presenter Proposals	76
Martha E. Rogers Scholars Fund	77
Membership Application Form	78

### Internet news

The internet address on the cover, [www.Energy-Enigma.com](http://www.Energy-Enigma.com), is the address of Vidette Todaro-Franceschi's homepage, a site well worth visiting. She is the author of *The Enigma of Energy: Where Science and Religion Converge*, the book reviewed on page 48 in this issue of *Visions*.

Fran Biley has recently updated and renamed the Martha E. Rogers homepage. It is now called the homepage for Unitary Health Care Practice. The address, however, is the same: [www.uwcm.ac.uk/uwcm/ns/martha/homepage.html](http://www.uwcm.ac.uk/uwcm/ns/martha/homepage.html). There are links to a number of other homepages including Vidette Todaro-Franceschi's, Richard Cowling's, Fran Biley's and Marcia Anderson's along with a great deal of other interesting information. All of the information that was on the original page is still available.

At the end of July, Fran discontinued the Nurse-Rogers list serv. He has moved all of the archives and the reference lists to the homepage, so they are all still available.

## **VISIONS: THE JOURNAL OF ROGERIAN NURSING SCIENCE**

### **Guidelines For Authors**

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.). References - see page 251. Although the APA manual states that the first line of each reference should be indented five to seven spaces as you would a paragraph, it also states that the typesetter will arrange the reference list in hanging indent format for publication. Since *Visions* is desk top published, we prefer that you submit the reference list with hanging indents.
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 or Microsoft Word, 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 professional title, and running title) (Optional: e-mail address).
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. Manuscripts are accepted for review at any time during the year. Deadlines for the next issues are December 1 and June 1. Submit 4 copies of the manuscript to:

Sheila Cheema, RN;PhD  
110 Elk Avenue  
New Rochelle, NY 10804

### **Columns:**

1. There are six potential columns - Controversies, Imagination, Emerging Scholars, Book Review, Instrumentation/Methodology and Human-Environmental Field Patterning Practice - that will appear as submissions are received and accepted
2. Selections for columns are editorial decisions. Only 2 copies need to be submitted. Upon acceptance the author/authors must submit both a hard copy and a disk. No honorarium is paid to authors of columns.

## REVIEW PANEL

Alice Adam Young, RN;PhD

Howard Karl Butcher, RN;PhD,CS

Jacqueline Fawcett, RN;PhD;FAAN

Leah Gorman, RN;PhD

Joanne Griffin, RN;PhD

Sarah Hall Gueldner, RN;DSN;FAAN

Effie Hanchett, RN;PhD

Linda Johnston, RN;PhD

Mary Madrid, RN;PhD

Katherine Matas, RN;PhD

Martha Raile Alligood, RN;PhD

Pamela Reed, RN;PhD;FAAN

Francelyn Reeder, RN;PhD

Barbara Sarter, RN;PhD

Julie Anderson Schorr, RN;PhD

Nancy Sharts-Hopko, RN;PhD;FAAN

Patricia Trangenstein, RN;PhD

Dorothy Woods Smith, RN;PhD

Juanita Watson, RN;PhD

### Library Subscriptions

Library subscriptions to *Visions* are available at \$20 per year. We encourage all of you who are faculty/students to encourage your librarian to subscribe. Show your copy to the librarian so she/he can see what a valuable addition it would be to the journal collection. Many libraries subscribe through subscription services such as EBSCO. However, it is also possible to subscribe directly by sending a check for \$20 (U.S. funds only) payable to Society of Rogerian Scholars, Inc. It can be mailed either to SRS at Canal Street Station, P.O. Box 1195, New York, NY 10013-0867 or to Sheila Cheema, Executive Editor, at 110 Elk Avenue, New Rochelle, NY 10804-4231.

Because SRS is a membership organization, our publications are benefits of membership. Each member receives *Visions* and the newsletter. Therefore, individual subscriptions are not available.

Back issues of the journal are available for \$15 a copy. The 1993 issue has been reprinted and spiral bound. It is available for \$20.00. If you would like to purchase a back issue, contact Sheila Cheema at the address above.

## Editorial

This is our 8th edition of *Visions*. Although we had hoped to progress to two issues per year, we are still not receiving enough material to do so--maybe next year. However, people are reading *Visions* and asking for reprints of articles and permission to quote from the journal. One person wrote for permission to "quote extensively" from one article, and permission was not granted. When requesting permission to reprint material, it is necessary to specify exactly what is to be used and to explain where and how it will be used. Publishers usually have specific forms to be completed that should be filled out and sent with the request.

Authors submitting manuscripts to *Visions* also need to secure permission for materials copyrighted elsewhere. An issue arose with such material in one article in this journal, so the Executive Editor initiated a search to update our knowledge about copyright laws and fair use. We wish to share some points with you and offer suggestions for finding more comprehensive information.

Fair use governs the amount of another's material that can be used without permission as long as it is adequately cited. However, there is no clear standard that defines "fair use"; in some cases, even a few lines can constitute copyright infringement. Sources such as the *Publication Manual of the American Psychological Association* will offer guidelines including numbers of words, but those are not definitive guidelines. Some issues to be considered are the amount and importance of the quoted material in relation to the entire work and the potential effect of use on the original copyrighted work. If one wanted to reproduce a whole poem of 50 words, it probably would not be fair use, but 50 words from a long work probably would constitute fair use. Publishing attorney Lloyd J. Jassin cautions that fair use is not a right but a defense to copyright infringement. Readers are directed to his website, <http://www.copylaw.com/forms/fairuse.html>.

Even if you do not need permission, you do need appropriate acknowledgement. A citation must appear in the text with a corresponding entry in the references. We often find discrepancies in the manuscripts we receive that must be corrected before publication in *Visions*.

Two excellent books on copyright law, written by attorneys, are the following:

1. Fishman, S. (2000). *The copyright handbook: How to protect and use written works*, 5th ed. Berkeley, CA: Nolo.com.

This reference contains a computer disk, suitable for both Windows and Macintosh, an entire chapter on electronic material, and copies of appropriate copyright forms.

2. Jassin, L., & Schechter, S.C. (1998). *The copyright permission and libel handbook: A step-by-step guide for writers, editors, and publishers*. New York: Wiley.

Another internet resource is the U.S. Copyright Office, which offers forms and information on copyright basics. The address is [www.loc.gov/copyright](http://www.loc.gov/copyright).

# PERCEPTION OF TIME, SLEEP PATTERNS, AND ACTIVITY IN SENIOR CITIZENS: A TEST OF A ROGERIAN THEORY OF AGING

Martha Raile Alligood, RN;PhD  
Sandra L. McGuire, RN;EdD

## ABSTRACT

*With the increasing percentages of elderly people in the population of the United States, an understanding of their development becomes critical to the delivery of effective nursing care. Utilizing a Rogerian theory of aging this study was undertaken to describe the relationships among perception of time, sleep patterns, and activity, a potential intervening variable. A cross-sectional descriptive survey design was utilized to solicit a volunteer sample for this level II descriptive study of men and women 55-94 years of age (n = 221) at a local Senior Citizens Center. Although the theory of aging was not supported in this sample, analysis of the data did reveal important findings. Significant relationships included activity to perception of time and activity to movement during sleep. Since activity was a significant intervening variable in relation to perception of time and sleep patterns in this elderly group, this beginning descriptive study suggests activity may be a better marker for aging than chronological age in studies of human development in aging populations. Limitations of the study are acknowledged in the conclusion, and theoretical questions are raised along with recommendations for future research.*

America is aging! In 1900, 4% of the U.S. population, 3 million people, were age 65 or over. Today, almost 13% of the American population, nearly 34 million people, are over age 65, and by the year 2040 older Americans are predicted to comprise approximately 22% of the population. Everyday almost 6,000 Americans celebrate their 65th birthday (American Association of Retired Persons [AARP], 1998). With the increasing percentages of elderly people in the United States, the need to understand their development is critical to the delivery of effective nursing care. In fact, the National Commission on Nursing

Implementation Project (1989) identified the graying of America as a serious health challenge, issuing a call for research focused on the dynamics of the aging process. This study addressed the challenge of the National Commission by studying time perception, sleep patterns, and activity in senior citizens using a Rogerian theory of aging as the guiding framework. This theory provided a nursing conceptual system for studying the dynamics of the aging process as a unitary human developmental experience.

## Literature Review

Sleep pattern studies of the elderly in the nursing literature in the 1980s suggested sleep patterns do change with age (Hayter, 1983). In a study of the hospitalized and non-hospitalized elderly, sleep pattern changes were related to factors other than the environment, suggesting developmen-

**Key words**           aging, sleep patterns,  
                                  time perception, activity,  
                                  Martha E. Rogers

**Received**             January, 2000

**Accepted**             May, 2000

tal changes (Pacini & Fitzpatrick, 1982). While some sleep pattern changes were described as detrimental others were noted to be beneficial or adaptive (Colling, 1983; Kedas, Lux & Amodeo, 1989). Although some studied relaxation as a nursing intervention to counter sleep pattern changes (Johnson, 1991; Lerner, 1982) others conceptualized sleep/wake patterns as rhythmic developmental phenomena as conceptualized by Rogers (Miller, 1984). This research builds on these studies by recognizing sleep pattern changes as a manifestation of pattern which is healthy and developmental rather than a pathological or detrimental phenomena.

The experience of acceleration of time with aging has been reported in the literature for 30 years (Kuhlen & Monge, 1968; Lemlich, 1975; Ross, 1991). More recently, nursing studies have been conceptualized using Rogers' framework deriving theories of time as an index of expanding consciousness (Newman, 1982) or in relation to activity (Engel, 1984; Fitzpatrick & Donovan, 1978). Factors proposed to be related to time perception have been situational control (Mentzer & Schorr, 1986), human time (Paletta, 1990), and movement (Newman, 1982). Schorr & Schroeder (1991) reported a significant relationship between time and activity. The present study builds on these studies and proposes a relationship among sleep pattern changes, perception of time as racing, and activity based on a Rogerian theory of aging. No study of the relationship among these three variables was found in the review of the literature. This theory would suggest sleep pattern diversity and perception of time as racing as pattern manifestations among the aging. Since activity is reported in sleep pattern changes and perception of time studies, activity was measured to control the potential intervening variable. Due to the possible relationship of depression with sleep pattern changes (Baekeland & Hartman, 1971)

and time perception of the elderly (Newman & Gaudiano, 1984), a depression scale was included with the measurement instruments for the study.

A comprehensive review of Rogerian research (Dykeman & Loukissa, 1993) has called for further work in the area of theory development and theory testing with a clear delineation of the theory guiding the research. Likewise, when Biley (1992) reviewed the literature on perception of time in Rogerian science he cited inconclusive evidence with regard to the relationship between perception of time as racing and aging and indicated the need for more research in this important area of human development in the elderly. This study addresses these concerns by specifying the theory of aging as a middle range theory derived from Rogers' theory of accelerating change and by testing the theory in a sample of senior citizens.

Although the nursing literature specific to the variables and the theoretical approach of this study is limited, the need for new theories of aging has been noted in the nursing literature. Burbank (1986) conducted a critical evaluation of the major developmental theories of aging and concluded that nurses should be careful not to use psychosocial, disengagement, and continuity theories as a basis for nursing practice, stating that more research was needed to gain insight into healthy and successful aging. Likewise, reviews of gerontological nursing research have consistently identified the lack of theoretical bases as a significant problem (Burnside 1986; Gunter & Miller, 1977; Haight, 1989; Robinson, 1981). Therefore, new nursing theories of aging are needed. This level II (Brink & Wood, 1988) descriptive study addressed that need by developing a theoretical base from a nursing framework.

### **Theoretical Framework**

Nursing research addressing the dynamics of the aging process among the



elderly remains scarce. Rogers' Science of Unitary Human Beings provides a perspective for the study of the life process (1970) or manifestations of pattern which emanate from the underlying process of human development (Alligood nee Raile, 1983).

A middle range theory, the theory of aging, derives from Rogers' theory of accelerating change and demonstrates the capacity of nursing theory to guide research by proposing variables for studies of senior citizens. Rogers viewed aging as a normal process of changes which emerge as manifestations of the evolving pattern of a human being's life. Rogers (1986) theorized that aging was a developmental process and that accelerating change manifested in the aged as they sleep less, have more varied sleep-wake frequencies, and experience time as racing. Although studies of younger adults have generally supported Rogers' theory of accelerating change (Alligood, 1986;1991; Cowling, 1986; Ference, 1986) findings in studies of the elderly have been less supportive (Alligood, 1990; 1991; 1992). Efforts to better understand these earlier findings with the elderly led to the selection of the theory of aging and the variables for this study.

#### **Purpose of the Study**

The purpose of this research was to study perception of time and sleep patterns in an aging sample. An additional variable, activity, was included in the research design in order to control for it as a potential intervening variable. Therefore, the research question guiding this study was: What is the relationship among perception of time, sleep patterns, and activity in senior citizens?

#### **Definitions of Major Terms Used in the Study**

In this study the variables of sleep patterns, time perception, and activity and senior citizens were defined theoretically and/or operationally as follows:

1. Sleep pattern changes are reflections of diversity in length of sleep and sleep-wake frequencies as measured by the Sleep

Questionnaire (Baekeland & Hoy, 1971; Johnson, 1991).

2. Time perception is changes in how time is experienced as measured by the Time Opinion Survey (Kuhlen & Monge, 1968).

3. Activity is defined as the type and amount of participation in activity at the Senior Center as measured by the *Activity Assessment Form*.

4. Senior citizens are defined as persons 55 years and older at the center where the data were collected.

#### **Sample and Research Design**

A cross-sectional descriptive survey design was utilized for the study. A convenience sample of 234 volunteers was solicited from a local Senior Citizens Center. The adjusted sample (n = 221) consisted of 57 men (26.5%) and 158 women (73.5%) and ranged in age from 55 to 94 years old. Four subjects were removed due to incomplete data, and 9 were removed because of signs of clinical depression and referred for counseling. The mean age of the sample was 71 years. Eighty percent of the sample were white, 19% were black, and 1% were of Hispanic origin. In relation to marital status, 3% were single, 39% were married, 11% were divorced, and 47% were widows or widowers. Only 7% of the sample were working. The educational level of the sample ranged from 2 years to 20 years of formal education. Seventeen per cent of the sample rated their health as excellent, 51% as good, 31% as fair, and 1% as poor. Sixty seven percent of the sample owned a pet (dog, cat, or bird). Table 1 presents a description of the sample, and the average participant in the study is summarized in Table 2.

#### **Method**

The study was approved by the Human Subjects Review Committees in the College of Nursing and University as well as

Table 1.

Description of the Sample

<b><u>Age</u></b>		
Range	55-94 years	
<b><u>Education</u></b>		
Range	2-20 years	
<b><u>Gender</u></b>		
	<b>n</b>	<b>%</b>
Male	57	26.5
Female	158	73.5
<b><u>Race</u></b>		
White	173	80
Black	41	19
Hispanic	2	1
<b><u>Marital Status</u></b>		
Single	7	3
Married	85	39
Divorced	24	11
Widowed	101	47
<b><u>Employment</u></b>		
Retired	192	93
Non-retired	14	7
<b><u>Pets</u></b>		
Dog, Cat, Bird	132	67
No	66	33
<b><u>Health</u></b>		
Excellent	37	17
Good	111	51
Fair	67	31
Poor	3	1

being approved by the Senior Center's Board. A demographic form and three paper and pencil measures were used to collect the data. Two descriptive instruments, a Time Opinion Survey (Kuhlen & Monge, 1968) and a Sleep Questionnaire

(Baekeland & Hoy, 1971; Johnson, 1991), were used to assess perception of time and sleep pattern changes as set forth in the theory. Activity, a potential intervening variable, was measured descriptively with the Activity Assessment Form, a tool designed to assess participation in the various activities at the senior center and a second form which asked participants to self-rate their level of activity as very active, active, not very active, or not active.

Table 2.  
Selected Characteristics Of The Average Participant

Gender:	Female
Age:	71
Race:	White
Marital Status:	Widowed
Employment Status:	Retired
Education:	12.6 years
Pets:	Owns 1 or more pets
Health Status:	Good

Sample questions from the Time Opinion Survey (Kuhlen & Monge, 1968) and Sleep Questionnaire (Baekeland & Hoy, 1971; Johnson, 1991) are provided in Figure 1. Besides its known relationship to sleep, depression has been suggested as an explanation for decreased subjective time in the elderly (Newman & Gaudiano, 1984). Therefore, this additional potential intervening variable was controlled for by adding the adapted Zung (1974) "Are You Depressed?" test to the Sleep Questionnaire. Examples

of activities on the Activity Assessment Form included items such as TV viewing, playing cards, ceramics, weaving, line dancing, exercise, Happy Hikers, and cloggers, reflecting various levels of activity. The instruments were reviewed by the researchers for face validity to test the theory of aging.

Figure 1.

### Sample Questions From The Instruments

---

A sample question from the *Time Opinion Survey*:

How does time pass for you? Is it...

\*racing?

\*passing as usual?

\*passing slowly?

A sample question from the *Sleep Questionnaire*:

Compared to 10 years ago, do you wake up more or less often?

\*more

\*less

\*no change

---

Data were collected over a five day period Monday to Friday at the center from 8 am to 5pm. Potential volunteers were notified about the study through *Elder Views & News*, a local newsletter which includes activities taking place at the center. In addition, large posters were placed at each entrance to the center announcing the study and soliciting volunteers. A researcher and research assistant were present in the center at all times during data collection. Volunteers were seated at tables in a well lit room designated for data collection. Participation took approximately 30 minutes. The University logo pencil used to complete the forms was given to participants as a small token for volunteering. Approximately 8 subjects required assistance completing the forms

due to inadequate vision or reading level.

### **Analysis of Data**

Data were analyzed as follows: the demographic data were analyzed for frequencies, central tendency, and percentages to provide a description of the sample. Data from the other instruments were analyzed to answer the research question, what is the relationship among perception of time, sleep pattern changes, and activity and to test the theory of aging and the research hypothesis that perception of time as racing and sleep pattern changes are related in an aging population. Relationships among perception of time, sleep patterns, and activity were tested by computing chi-squares to answer the research question. Chi-square is recommended to investigate the relationship between human attributes which are classified in two categories and where the correspondence of these attributes is to be tested (Garrett, 1958), such as perception of time and sleep pattern changes as set forth in the Rogerian theory of aging. Therefore, the theory of aging was tested using chi-square by computing the relationship between perception of time as racing and sleep pattern changes.

### **Findings**

No relationship was found between the perception of time and sleep pattern changes in this elderly sample. An analysis of perception of how time passes as compared to 10 years ago revealed that 43% described time as racing, 50% reported time passing as usual, and 7% indicated time passing more slowly. There were sleep pattern changes in 54% of the sample over the last 10 years. Table 3 illustrates the manifestations that the subjects described in relation to sleep pattern changes. The most frequently noted change was in the number of wakings per night. The participants' actual ages were analyzed in relation to perception of time and sleep pattern

changes. No significant relationship was noted with age. However, the relationship between age and change in patterns of falling asleep did approach significance ( $p = < .08$ ).

Table 3.

Sleep Pattern Change When Compared To 10 Years Ago

Manifestations	Change	No Change
Time of Retiring	44%	56%
Length of Time to Fall Asleep	52%	48%
Wakings per Night	65%	35%
Soundness of Sleep	38%	62%
Movement during Sleep	33%	67%
Hours of Sleep	53%	47%

Participants were asked to self-rate their own activity and the researchers rated their activity based on the data from the Activity Assessment Form according to the type and amount of activity reported. Using the data from the Activity Assessment Form, each participant was placed into either the active or less active category. Data from the self-rated measure of activity were also used to place them into two categories by grouping the top two (very active and active) and bottom two ratings (not very active, not active). The relationship of the two measures of activity was computed for interrater reliability, and there was a highly significant relationship ( $p = .006$ ) between activity as self-rated by

participants and the activity category as rated by the researchers.

All of the significant findings in this study were in relationship to activity. Activity was a significant intervening variable with both perception of time and sleep pattern change. The more active persons were, the more likely they were to have changes in perception of time. In fact, active persons were more likely to experience time as racing while less active persons experienced time passing as usual (Table 4). The active participants reported quiet sleep with less movement, fewer wakings, and more sleep satisfaction and less sleep pattern changes (Table 5).

Table 4.

Perception Of Time And Activity

Time	Less active	Active	Total
Time change	40	50	90
As usual	51	28	79
TOTAL	91	78	169

Chi-square = 6.84, df = 1,  $p = .009$

Table 5.

Sleep Pattern and Activity

Sleep	Less active	Active	Total
Quiet sleep	63	60	123
Restless sleep	27	10	37
TOTAL	90	70	160

Chi-square = 5.5, df = 1,  $p = .01$

## Discussion

This beginning, descriptive study was designed to test a Rogerian theory of aging. The theory predicted that participants who perceived time as racing would also have more diverse sleep patterns or sleep pattern change. The theory was tested in relation to chronological age and activity. Although 43% of the sample reported perception of time as racing and 54% reported sleep pattern change there was no significant relationship between the two variables in this sample. The theory was not supported. Chronological age and change in length of time in falling asleep approached significance ( $p = .08$ ).

Activity was a significant intervening variable suggesting the need for additional study of activity in relation to the aging process. In this study, activity was more related to perception of time and sleep patterns than chronological age. Therefore, study findings suggest activity may be a better index of human development than chronological age. This finding supports Biley (1992) who called for researchers to use non-chronological age indicators rather than chronological age in Rogerian research. The findings of this study support Rogers' postulate that aging is a developmental process but indicate the need for more research on aging specifically in relation to activity. The limitations of this study in the area of measurement are acknowledged. Although this is a common problem when designing theory-testing Rogerian studies, the lack of refinement of the instruments did limit the analyses.

## Conclusions and Recommendations

Whereas the findings of this study did not support the theory of aging being tested, they did lead to other important findings. The findings in relation to activity suggest the need for further study, for example, a study of the relationship between activity and expanding consciousness (Newman, 1982) in the elderly is indicated. The im-

posed motion in Gueldner's (1986) study of the elderly in relation to the activity findings in this study merit consideration. Furthermore, because Schorr and Schroeder (1991) also reported significance between time and activity further studies in other samples and settings are suggested. Our findings support Biley's (1992) contention that perception of time needs to be assessed as a unitary phenomenon. We would suggest that sleep pattern change is also a unitary phenomenon and therefore needs to be assessed individually. Creative designs are needed to test unitary phenomena. The findings of this study call into question the theoretical assertion that the two phenomena would necessarily be related or based on chronological age. Rather, our findings suggest time perception and sleep pattern changes among the elderly may be linked to activity.

These findings raise some interesting theoretical questions when considered in relation to findings of the earlier studies of the elderly in this program of research (Allgood, 1990; 1991; 1992). For example, is there a relationship between the creativity of human development in earlier studies (Allgood, 1986, 1990, 1991, 1992) and activity in the current study? Since activity was significantly related to the developmental changes of sleep pattern and time perception, could activity manifest the productivity or creativity of the life process which Rogers posits as continuous? If so, this would suggest that less activity would manifest less creativity and less well-being, or what we know as ill health and death. Finally, are the findings of the present study regarding activity explained by Rogers' early research question when she asked whether the relationship between "motion" and "development patterns" found in full-term infant studies also existed throughout the lifespan (Rogers, 1970, p. 114)?

In subsequent studies we recommend changes in research design such as

using a sample frame other than a Senior Citizens Center. Since activity is a significant variable in this study of the human development of seniors, one could raise the question: Are seniors who are more active also more likely to attend activities at senior centers? If so, there is a less active group in the community who also need to be studied. This would allow for inclusion of seniors living independently in the community as well as seniors who reside in long-term care and assisted living facilities. The sampling frame of attendees at the Senior Center is an acknowledged limitation of this study. The prominence of activity in these findings suggests the need for experimental studies with active and inactive groups of the elderly in a variety of settings to further understand the aging process in relation to this important variable. This research indicates the need for continued study of the elderly based on holistic nursing frameworks from which theories of aging can be derived and tested. This suggestion also highlights the need for studies to develop research instruments to measure the variables to be tested in the theories. In addition to testing theories derived from Rogerian nursing science and contributing to nursing knowledge development, it is suggested that the findings from this study may contribute to nurses' understanding of the importance of activity in the elderly and thereby enhance nursing practice.

## References

- Alligood, M.R. (1986). The relationship of creativity, actualization and empathy in unitary human development. In V. Malinski (Ed.) *Explorations on Martha Rogers' science of unitary human beings* (pp. 154-160). Norwalk, CT: Appleton-Century-Crofts.
- Alligood, M. R. (1990). Nursing care of the elderly: Futuristic projections. In E.A.M. Barrett (Ed.), *Visions of Rogers' science-based nursing* (pp. 129-141).
- Alligood, M.R. (1991). Testing Rogers' theory of accelerating change: The relationships among creativity, actualization, and empathy in persons 18-92 years of age. *Western Journal of Nursing Research*, 13(1), 84-96.
- Alligood, M. R. (1992). Exploring creativity and health in the elderly [abstracts]. International Nursing Research Conference: *Voyage into the Future: Through Nursing Research*, 291.
- American Association for Retired Persons (1998). *A profile of older Americans 1998*. Washington, D.C.
- Baekeland, F. & Hartman, E. (1971). Reported sleep characteristics: Effects of age, sleep length and psychiatric impairment. *Comprehensive Psychiatry*, 12(2), 141-147.
- Baekeland, F., & Hoy, P. (1971). Reported vs recorded sleep characteristics. *Archives of General Psychiatry*, 24, 548-551.
- Biley, F.C. (1992). The perception of time as a factor in Rogers' Science of Unitary Human Beings: A literature review. *Journal of Advanced Nursing*, 17, 1141-1145.
- Brink, P. & Wood, M. (1988). *Basic steps in planning nursing research*. Boston: Jones and Bartlett Publishers.
- Burbank, P. M. (1986). Psychosocial theories of aging: A critical evaluation. *Advances in Nursing Science*, 9(1), 73-86.
- Burnside, I. (1986). Gerontological nursing research: 1975 to 1984. In National League for Nursing, *Overcoming the bias of ageism in long-term care*. New York: National League for Nursing.
- Colling, J. (1983). Sleep disturbances in aging. *Advances in Nursing Science*, 6(1), 36-44.
- Cowling, W.R. (1986). The relationship of mystical experience, differentiation, and creativity in college students. In V. Malinski (Ed.) *Exploration on Martha Rogers' science of unitary human beings*. Norwalk, CT: Appleton-Century-Crofts.
- Dykeman, M. C. & Loukissa, D. (1993). The Science of Unitary Human Beings: A integrative review. *Nursing Science Quarterly*, 6(4), 179-188.
- Engle, V. F. (1984). Newman's conceptual framework and the measurement of older adults' health. *Advances in Nursing Science*, 7(1), 24-36.
- Ference, H.M. (1986). The relationship of time experience, creativity traits, differentiation and human field motion. In V. Malinski (Ed.) *Exploration on Martha Rogers' science of unitary human beings*. Norwalk, CT: Appleton-Century-Crofts.
- Fitzpatrick, J. J., & Donovan, M. J. (1978). Temporal experience and motor behavior among the aging. *Research in Nursing and Health*, 1(2), 60-68.
- Garrett, H.E. (1958). *Statistics*. New York: David McKay Company, INC.
- Guelndner, S. (1986). The relationship between imposed motion and human field motion in elderly individuals living in nursing homes. In V. Malinski (Ed.) *Explorations on Martha Rogers' science of unitary beings* (pp. 161-172). Norwalk, CT: Appleton-Century-Crofts.

- Gunter, L. M., & Miller, J. C. (1977). Toward a nursing gerontology. *Nursing Research, 26*, 208-221.
- Haight, B. K. (1989). Update on research in long-term care: 1984-1988. In National League for Nursing, *Indices of quality in long-term care: Research and practice*. New York: National League for Nursing.
- Hayter, J. (1983). Sleep behaviors of older persons. *Nursing Research, 32*(4), 242-246.
- Johnson, J. (1991). Progressive relaxation and the sleep of older noninstitutionalized women. *Applied Nursing Research, 4*(4), 165-170.
- Kedas, A., Lux, W., & Amodeo, S. (1989). A critical review of aging and sleep research. *Western Journal of Nursing Research, 11*(2), 196-206.
- Kuhlen, R.G. & Monge, R.H. (1968). Correlates of estimated rate of time passage in the adult years. *Journal of Gerontology, 23*, 427-433.
- Lemlich, R. (1975). Subjective acceleration of time with aging. *Perceptual and Motor Skills, 41*, 235-238.
- Lerner, R. (1982). Sleep loss in the aged: Implications for nursing practice. *Journal of Abnormal Psychology, 72*(3), 255-264.
- Mentzer, C. A. & Schorr, J. A. (1986). Perceived situational control and perceived duration of time: Expressions of life patterns. *Advances in Nursing Science, 9*(1), 12-20.
- Miller, F.A. (1984). *The relationship of sleep, wakefulness, and beyond waking experiences: A descriptive study of M. Rogers' concept of sleep/wake rhythm*. Unpublished doctoral dissertation, New York University, New York.
- National Commission on Nursing Implementation Project Report (1989). New York: National League for Nursing.
- Newman, M. A. (1982). Time as an index of expanding consciousness with age. *Nursing Research, 31*(5), 290-293.
- Newman, M. A., & Gaudiano, J. K. (1984). Depression as an explanation for decreased subjective time in the elderly. *Nursing Research, 33*(3), 137-139.
- Pacini, C. M., & Fitzpatrick, J. J. (1982). Sleep patterns of hospitalized and nonhospitalized aged individuals. *Journal of Gerontological Nursing, 8*(6), 327-332.
- Paletta, J. L. (1990). The relationship of temporal experience to human time. In E. Barrett (Ed.), *Visions of Rogers' Science-based Nursing*, 239-253, New York: National League for Nursing.
- Raile, M. M. (1983). *The relationship of creativity, actualization and empathy in unitary human development: A descriptive study of Rogers' principle of helicy*. Unpublished Doctoral Dissertation, New York University, New York.
- Robinson, L. (1981). Gerontological nursing research. In I. Burnside (Ed.), *Nursing and the aged* (2<sup>nd</sup> ed.). New York: McGraw Hill.
- Rogers, M.E. (1970). *An introduction to the theoretical basis of nursing*. Philadelphia: F.A. Davis.
- Rogers, M.E. (1986). Science of unitary human beings. In V. Malinski (Ed.) *Explorations on Martha Rogers' Science of Unitary Human Beings* (pp. 3-8). Norwalk, CT: Appleton-Century-Crofts.
- Ross, S. (1991). Contribution to the history of psychology: LXXV. Subjective acceleration of time with aging. *Perceptual and Motor Skills, 72*, 289-290.
- Schorr, J. A., & Schroeder, C. A. (1991). Movement and time: Exertion and perceived duration. *Nursing Science Quarterly, 4*(3), 104-112.
- Zung, W.W.K. (1974). *Zung self-rating depression scale*.

#### NOTES:

<sup>1</sup> This project was supported by the University of Tennessee, Research Administration and College of Nursing.

<sup>2</sup> The authors wish to acknowledge the assistance of their research colleagues: Dr. Ellie Brooks, Ms. Kathleen Conlon, Ms. Becky Davison, Dr. Mildred Fenske, Dr. Stephen Krau, and Dr. Ken Phillips.

#### Author Identification

Martha Raile Alligood, RN;Phd  
Professor  
University of Tennessee, Knoxville  
College of Nursing  
1200 Volunteer Blvd.  
Knoxville, TN 37996-4180  
(865) 974-6804  
(865) 974-3569 (FAX)

Sandra L. McGuire, RN;EdD  
Associate Professor  
University of Tennessee, Knoxville  
College of Nursing  
1200 Volunteer Blvd.  
Knoxville, TN 37996-4180  
(865) 974-4151

Please address correspondence to Dr. Martha Alligood

# SPECULATIONS ON THE UNPREDICTABLE FUTURE OF THE SCIENCE OF UNITARY HUMAN BEINGS

Elizabeth Ann Manhart Barrett, RN; PhD; FAAN

## ABSTRACT

*Speculations concerning the unpredictable future of Rogers' science include developing partnerships with consumers and multidisciplinary colleagues with the possibility of unitary science as a theoretical umbrella for all health care disciplines. Nursing centers are viewed as the hub for all nursing services and are seen as essential both to igniting nursing's visibility and extricating ourselves from the biomedical model. Scholarship challenges include expansion of avenues for developing Rogerian knowledge as well as abstraction-integration of existing Rogerian research knowledge, use of Rogerian research methodologies, and translation of Rogerian science into simple language to facilitate communication with consumers and other providers. The impact of the quantum, biomolecular, and computer revolutions and other space age changes on how we will grow Rogerian science in the future are explored.*

"The future is here. Fantastic, yes, and we are integral with it."

(Rogers, 1994, cover)

"In an ever shrinking world, it is important to embrace diversity."

(Yanni, live in concert, January 17, 1998, New York City)

"Dare to dream big dreams, then will them to happen."

(Howard Schultz, Chairman and CEO of Starbucks)

The new world view is alive and well in the year 2000! One could easily imagine that the quotes by Yanni and Schultz were spoken by Rogers. Increasingly it seems as if the world and Rogerian science are on the same wavelength, resonating throughout

the unitary universe, creating powerful change. As Rogers used to say, "The future is unpredictable, but it sure is fun to speculate" (Personal communication, August 30, 1993). The major purposes of this article are to present futuristic ideas of unitary emergence of nursing for readers to ponder and to suggest that others explore these possibilities more seriously in future articles.

Futurists agree that the future is both unknowable and undecided. As people and their environments become increasingly diverse, phenomena emerge that could not have been predicted by what came before them. Indeed, the future will continue to emerge through what we do in the years ahead to knowingly or unknowingly create it. Our power lies in recognizing our capability for building our dreams of tomorrow, yet keeping in mind that "in the future there are no roads" (Brown, as cited in Kaku, 1997, p. 265). As Yogi Berra said, "prediction is very hard, especially when it is about the future" (Kaku, 1997, p. 3).

Speculating about the future requires letting the Science of Unitary Human Beings

**Key words** future, partnerships, scholarship challenges, unitary science, nursing centers

**Received** October, 1999

**Accepted** April, 2000



(Rogers, 1970, 1992) out of the box, as creative thought is the antithesis of the certainty and comfort of the box (Munhall, 1997). Rogers was the role model par excellence for out of the box thinking in nursing. As Parse (1994) eulogized, "Rogers' voice will not be silenced" (p. 47), but why not hook it up to a PA system? Rogerians are all but invisible in the larger world of health care. Isolation stagnates growth. New knowledge in Rogerian thought may die on the vine or at least shrivel and shrink if we keep this knowledge to ourselves in the box. What a tragedy; the Science of Unitary Human Beings is a terrible thing to waste.

It's time to break out of our parochialism. Create new coalitions. Take action with the creative courage to speak our different voice. Too often our nursing practice heritage cautions us to stay in the box, telling us, "We're nurses. We don't make the rules, we don't break the rules; we just follow the rules and jump on the nearest bandwagon riding on the coattails of medicine." Rogers said, "No way" and started a new unitary science band. Now it's our job to figure out how to broadcast this music. Critics might consider this a call for a Rogerian bandwagon. Nevertheless, the voice for disciplinary nursing knowledge needs to be heard outside our own circles.

We can begin by extending our broadcasting to our fellow nurses and others. Rogers did not develop this science only for nursing and for nurses; it was a gift to the world. She believed it could be used to explain any phenomenon focused on unitary human beings. We need to tell our story through our research, our teaching, our practice, to those who otherwise would not hear it.

### **Partnerships**

An effective way to tell the Rogerian story is through forming mutual process partnerships with consumers, with other disciplines, with philanthropists, with foun-

dations, and with industry including insurance companies. Mutual process partnerships emphasize awareness of the mutual participation of all partners in order to encourage consideration of the nature of involvement in that participation by all partners. Partnerships take us out of the health care box to create a new mutual process between people and providers. Turmoil and dissatisfaction in the present system are growing intolerably. The power of the people is bringing medicine's monopoly of health care to a screeching halt. Health advocacy can operationalize Rogers' science in the service of people. Health advocacy is related to mutual process partnerships as people choose with awareness how they will participate in health care changes they wish to create. This is the power of the people.

It's time to go public with the Science of Unitary Human Beings, both within nursing and beyond. It now seems to be common knowledge that consumers, our most important partners, are seeking a new kind of wellness. They're tired of symptom-oriented care given by providers who often don't know their names and usually don't know the first thing about their lives (Gordon, 1998). According to Gordon (1998, p.65), "The average time a primary care practitioner spends with a patient before writing a prescription is three minutes."

Can we teach people how to enhance their involvement, when they believe that would be beneficial, in health-related decision-making? Can we give them tools to help them become their own health advocates? Can we teach them the scientific art of health patterning power, where power is defined as the capacity to participate knowingly in change (Barrett, 1998a)? Can we use power enhancement to educate consumers to know they are free to make aware choices regarding their involvement in life situations including health issues? Of course we can. Cody (1994), in his plea for nurses

to recognize the role of the person as his/her own case manager, warned that "health care professionals now face the probability that if they do not move with health-care consumerism, they are likely to be run over by it" (p. 181).

We can bring education programs and health services to universities and to industry. Insurance companies are discovering that health promotion, disease prevention, and health patterning modalities are cost effective and worth reimbursing. Nurses, however, are often not the health professionals providing these health promotion services. Perhaps it is also time to put insurance companies on notice with Nightingale's warning to never mix up medicine and nursing for it spoils both (Nightingale, 1859/1946).

We also need to get our message out by sharing with like-minded groups through publishing in multidisciplinary journals, conducting multidisciplinary research, and presenting at multidisciplinary conferences. In all these arenas, nursing now has a weak presence (Watson, 1995). However, Rogers' science offers a framework for both consumers and health professionals to understand unitary people and their mutual process with the environment from a noncausal, nonlinear view. Could an ontological matrix for health care called unitary science, embracing the postulates and principles of the Science of Unitary Human Beings, emerge? Could unitary science provide a multidisciplinary umbrella for understanding the nature of people and their environments as unitary? Questions of health and well-being, of illness and disease, of living and dying are complex and cannot be answered by the theories and research methods of a single discipline. Knowledge of various disciplines is required to address the diversity of pattern manifestations of the unitary person. A common understanding of the person as unitary would be nursing's unique contribution and, yet, this nursing

knowledge could enlighten other disciplines. Imagine the change in health care delivery that would be generated if all professions viewed people through a unitary rather than a particulate, reductionist lens. Sharing of nursing knowledge does not detract from our distinctness. Similarly, knowledge developed from the unique perspective of other disciplines is general information that may inform nursing practice.

Unitary science, as an overarching framework to allow many disciplines to understand the unitary person, could heal the current fragmentation in care delivery. One group of health care scientists alone won't be able to create the healing tapestry in its entirety; however, different groups can create the diversity of threads from which it is woven (Kaku, 1997). Could unitary science be the substance that holds it all together? Since nursing is the discipline whose phenomenon of concern is the whole person in mutual process with the environment, could we orchestrate transcending the trees of the various disciplines to help others see the big picture of the forest, the unitary view?

Becoming more multidisciplinary, however, does not mean a blending of disciplines nor does it mean becoming less disciplinary. In fact, as the different disciplines come together united by similar world views, the imperative for a unique focus on each discipline's phenomenon of concern will intensify. The contribution of the various disciplines' knowledge to well-being and health care concerns will enhance the overall plan and delivery of care through their specificity. A similar discussion was reported in *The New York Times* regarding osteopathic and allopathic medicine. A medical sociologist and historian said, "Osteopathic Medicine has to demonstrate that it can offer something distinctive, unique and beneficial to the patient that allopathic graduates can not offer. If osteopathic physicians become interchangeable with

MD's, then there's no compelling reason for the profession to exist" (Stevens, 1998, F1).

Nowhere is such an argument more relevant than it is in nursing since nurse practitioners have taken on many activities traditionally considered to be within the domain of medicine. Additionally, nursing historically has been closely associated with medicine and has struggled particularly during the past 30 years to establish itself as an autonomous discipline with a distinct knowledge base. This is not to say that knowledge of one discipline is not useful to practitioners of another discipline; yet, each discipline has its unique focus, and practitioners are not interchangeable.

### **Nursing Centers**

We must take nursing's story to the public and be consumers' partners and advocates, and we must do it now. Our partnerships can be implemented through nursing centers that will transform Rogers' ideas from being simply "nice to know" to something "essential to use." It is time to update a previous discussion of nursing centers (Barrett, 1990, 1993, 1994a), as the continuing dream is for nursing to extricate itself from the biomedical model and base practice on substantive nursing knowledge represented in the extant nursing theories and frameworks. Establishing many such centers would answer the question of which discipline will define the field of nursing. Andersen and Smereck's (1994) Rogerian nursing care delivery system is a quintessential example that has demonstrated since 1983 that nursing centers based on nursing science frameworks are viable. The Martha E. Rogers Center for the Study of Nursing Science at New York University has potential to serve as a hub of Rogerian research and other scholarly activities including teaching and consultation, as well as to provide multimedia and human resources, and also deliver consumer services.

Watson (1995) explored why "nurses

remain 'invisible' in spite of their achievements" (p. 81). She pointed out that:

the nursing profession has yet to transform itself with respect to advancing within a consistent graduate educational model that is grounded in the nursing paradigm. Moreover, the sad story of tongue and pen is that nursing's caring-healing and health model, and values orientation have largely been ignored, dismissed, or controlled by a medicalizing of health care philosophy and educational and clinical practices—such events have thus monopolized health care policies and politics (p. 81).

Watson's statement regarding "medicalizing" reminds us to continue to address paternalism and the hierarchical organization of most health care delivery models. This is essential if nursing centers based on nursing frameworks are to optimize their power through knowing participation in transforming the system.

Consumers are driving the health care bus, and they will soon stop parking at places where no one is listening to them. Nursing centers that avoid the cookie cutter approach offer clients a refuge from the health care storm. Perhaps the day will come when all nursing activities will be orchestrated through the centers, including out-patient services as well as providing nurses for hospitals and school-based nursing centers. Nursing centers without walls will take many forms – in churches, health clubs, shopping malls, airports, train and bus stations. Nurses will take clients into their homes after surgery or for rehabilitation or for lifestyle consultation. Nurses will facilitate groups of all kinds teaching people how to thrive rather than survive. Every family will have the option of a family nurse.

The Internet and its related technologies will truly revolutionize the way care will be delivered through nursing health pattern-

ing centers. Nurses will make home visits by appearing on consumers' digitized TV wall screens. Intercontinental consulting and commuting across borders will be common. Welcome to work in 2010 (Kaku, 1997). Virtual reality will collapse time and space. It will be possible to learn anything, anywhere, anytime. In fact, consumers will often bypass health professionals altogether by using the computer to access medical and nursing knowledge including professionally developed protocols needed to care for themselves. The Internet will allow both professionals and consumers to surf the tidal waves of change (Kaku, 1997).

Nursing centers will be operated and staffed by advanced practice nurses, either masters-prepared or N.D. as future entry level. Clients will take charge of their health patterning and become their own healer; they will develop their "nurse within." As unitary scientists and artists, we will be living our theories and frameworks as healing partners of those for whom we care. It's about time we speak our truth to the people crying out for the services we can offer.

Although people are unitary, they often experience life, including health care, in a fragmented way. They want an integral experience to bring them in touch with their wholeness (Luck, 1998). Since nursing does not deal with health care phenomena in the domain of other disciplines, nurses need to make appropriate referrals to other unitary practitioners who also will not treat people in bits and pieces. Rather, they will facilitate healing clients' experiences of fragmentation. A unitary, multidisciplinary practitioner who is not a nurse may be a specialist yet able to relate to the whole person. Such practitioners would also make referrals not for "parts," but to other unitary practitioners who see people as a whole even though looking at particular pattern manifestations that are within the domain of a particular discipline or specialization within a discipline (Luck, 1998).

## Scholarship Challenge

Given the arguments that have been proposed, it seems appropriate to further speculate about the unpredictable future of the Science of Unitary Human Beings. The ever accelerating momentum of the new millennium requires new ways to keep pace. Several scholarship challenges for the immediate days ahead are suggested.

### Challenge #1 : New Rogerian Knowledge Makers

We might benefit from Rogerian knowledge workers of three types. First, there will be *phenomenon knowers* who will increasingly develop new knowledge in unconventional ways such as the theoretical elaboration concerning spirituality and intentionality that have emerged on the two Rogers listservs ([nurse-rogers@mailbase.ac.uk](mailto:nurse-rogers@mailbase.ac.uk); [merogers-center@forums.nyu.edu](mailto:merogers-center@forums.nyu.edu)). This mutual processing of a group field thinking together in a nontemporal, nonspatial domain allows for pandimensional exploration of new ideas.

The second new type of knowledge makers are the *synthesis knowers* who abstract scientific literature relevant to new paradigm thinking. There's too much information and too little time to put it together ourselves. Conventional methods of reading journals will give way to search processes with synthesized information custom selected according to our interests and delivered to us via the Internet.

The third type are the *transformation knowers*. They will translate through a Rogerian lens information from phenomenon and synthesis experts thereby providing a matrix for new Rogerian scholarly work to emerge. Consider transformation of Targ and Katra's (1998) statement that "Diseases are conversations or events involving the exchange of information among cells within a living system" (p. 253). Transformation knowers would help us understand this not as physiology or a mind-body link, but as a mutual process of one's unitary

wholeness.

Explicating Rogerian research knowledge is a critical challenge before us. Where is this new knowledge? Oh, make no mistake it is there, hiding under piles of paper, covered up in dissertations, other research reports, and various publications. We can't see the trees for the forest. In addition to integrative review articles of various phenomena and meta-analyses when appropriate, it is suggested that these reviews and analyses be extended. That is, previous research needs to be carefully gleaned to extract the new knowledge, stated clearly and organized according to the Rogerian postulates, principles, theories and specific phenomena. Further, research should be analyzed in reference to how it can be woven into the fabric of the Science of Unitary Human Beings. This entire process is called abstraction-integration.

#### Challenge # 2: Development and Critique of Rogerian Research Methodologies

Three unique basic research methodologies have been created, respectively, by Butcher, Carboni, and Cowling (Cowling, Barrett, Carboni, & Butcher, 1997). Butcher's unitary field pattern portrait research method reflects a creative synthesis of constructivist inquiry and Cowling's pattern appreciation theory (Cowling et al, 1997). This qualitative method embraces the participants' description of their experiences, perceptions, and expressions of the phenomenon being investigated. Carboni's work involves the creative idea of "qualitative measurement" which she differentiates from quantitative use of numbers. She proposes that this method transcends time and space and argues that inductive and deductive data cannot be separated (Cowling et al., 1997, p. 54). Cowling's pattern appreciation case study method integrates the theory-research-practice trilogy within the pattern appreciation theory providing a context for viewing participants' answers to research questions (Cowling et al., 1997).

We have a disciplinary imperative to use these methods, not exclusively, but extensively (Barrett, 1998b). They represent the next leap toward full disciplinary status and a critical path toward enriching our understanding of unitary human beings.

Parse (1998) recently commented, "Artful criticism is an essential process in the knowledge evolution of a discipline" (p. 43). Rawnsley's (1994) critique of Butcher's research method remains an important example of the process. After noting the excellence of Butcher's efforts, her critique addressed two issues she considered salient. Specifically, she explored "the validity of paradigm status for the Science of Unitary Human Beings and the degree of confidence in its epistemological metaphors" (p. 432). Additional critiquing of unique research methods such as those developed by Butcher, Carboni, and Cowling (Cowling et al., 1997) will further the growth of Rogerian science.

#### Challenge # 3 : Rogers 101

Translating Rogerian science into simple language continues to be a challenge even for the most seasoned Rogerians. For example, we cannot substitute bodymindspirit for unitary. Since the whole is different from the sum of parts, we must describe the difference that is the wholeness, not the parts. The language dilemma was explored in Gold's (1997) excellent article on unitary vs. bodymindspirit and Dossey's (1997) excellent response. Gold suggested a shift in nursing terminology from bodymindspirit or biopsychosocial wholeness to inseparable or unitary wholeness. Dossey agrees that the essence of humans is inseparable or unitary wholeness, but believes there is usefulness in speaking of parts to get a "fuller, richer view of the whole" (p. 7). She argues that "using terminology that only a small percentage of nurses understand is not smart, for it serves only to silence the impact of our voice" (p. 7). Dossey further proposes that we need

to be able to communicate the essence of nursing at a level that all can understand. Gold, on the other hand, notes that with a shift to inseparable, unitary wholeness, "nursing's unique distinctiveness as a profession is clarified and its congruence with nursing science is clearly reflected" (p. 4). Embracing Gold's plea to shift terminology, yet solving the issue of understandable language clearly articulated by Dossey, could thrust nursing lightyears ahead and further illuminate our position on the health care map.

Although science requires a language of specificity, the language barrier we encounter in communicating to others may be our most difficult and perhaps most important challenge. We can no longer say, even if it is true, that there are no words to adequately describe these ideas or that those we care for understand "it" when they experience Rogerian nursing care, even though they do. If we want to get out of the box, we must find a way to communicate simply without simplistically demolishing the substantive profoundness of this science. We are hard pressed to explain this science in all its majestic richness to the person on the street, even though, paradoxically, these ideas are everywhere. When people ask, "How is this view of people and their world different from other views, holistic or otherwise," we need the language to explain it in understandable words so they "get the difference."

### **Interface of Rogerian Science with Societal Revolutions**

The future development of Rogerian scholarship will not take place in a vacuum. "Human knowledge is doubling every 10 years....Computer power is doubling every 18 months. The Internet is doubling every year" (Kaku, 1997, p. 4). Everyday there are new advances in computers, telecommunications, biotechnology, and space exploration. Many of these seem directly explainable in terms of Rogerian science. A recent

example suggests confirmation of Rogers' theory of accelerating change. The discovery that the universe may expand forever and at an accelerating pace (Wilford, 1998) is consistent with Rogers' ideas of the change process. Accelerating expansion of the universe was hailed as a top astronomy discovery of the century worthy of a Nobel Prize (Wilford, 1998).

Similarly, on the human front, the mutual process is birthing a new era. The actualization of our capacity to participate knowingly in choreographing future changes is accelerating. Unlike any time before, we are increasingly aware of the power of our choices to more fully participate in creating ourselves and our unknowable future. As our pandimensional awareness further diversifies, our options for innovative involvement proliferate. Actualizing power doesn't just happen; it manifests when we are a knowing participant in all aspects of life and living, death and dying. This acceleration in possibilities for more fully creating ourselves and our environment brings with it awesome responsibility (Kaku, 1997).

Kaku (1997) describes the three scientific revolutions of the 20<sup>th</sup> century: the quantum revolution which helped spawn both the biomolecular revolution and the computer revolution by way of x-ray crystallography; the transistor; and the laser emerging from quantum theory. "With the basic laws of the quantum, DNA, and computers discovered, we are now embarking upon a much greater journey, one that ultimately promises to take us to the stars...as our understanding of space-time increases" (Kaku, 1997, p. 355). The pandimensional Rogerian worldview provides a theoretical perspective for understanding these 20<sup>th</sup> and 21<sup>st</sup> century "revolutionary emergents."

Kaku notes the transition from reductionism to synergy and projects that an enhanced cross-fertilization between these revolutions will spawn an accelerating rate of scientific discovery. Often, when an

impasse in one field is reached, an unexpected development in another field contains the solution. For example, the ability to map the human genome has been driven by the exponential increase in computer power (Kaku, 1997).

It is possible that there may be similar cross-fertilization in the health care fields. For example, on December 31, 1999 on CBS television, representatives from Carnegie Mellon University were demonstrating an autonomous, mobile robot named "Flo." It is proposed that this robotic "nurse" will be able to deliver home care to the elderly so they can continue living in their homes independently with health problems that presently preclude remaining at home without a caregiver. "Flo" listens to people and then interacts by talking with them. "Flo" will remind people to take their medications and assist them to carry out various activities of daily living. Although such technological wonders are on the horizon, they will never replace the real thing -- a human nurse, since machines will never be different from the sum of mechanical parts. A human being is not a machine and a machine is not a human being. Regardless, Rogerian nursing may rise or fall related to its ability to interface with developments in the quantum, biomolecular, and computer revolutions, as well as other emergent world happenings. For example, the Internet is wiring up the entire planet and relieving us of the mundane, time-consuming tasks of shopping, banking, paying bills, or commuting to work. Our grandchildren will look back on us as we do on our grandmothers who spent Monday washing clothes, Tuesday ironing clothes, and so forth. Yet, will they look back on us as pioneers in responsible use of technology to change delivery of nursing services while maintaining the human presence of the nurse?

On the biotechnological front, many "microorganisms involved in infectious diseases will be conquered in virtual reality by

locating the molecular weak spots in their armor and creating agents to attack those weak spots" (Kaku, 1997, p. 15). Yet we know that if the health patterning of the environment is not also considered, new mutations with more serious consequences may arise. "Conquering organisms" is not the language of unitary nursing and does not reflect the mutual process of energy fields. Programs of Rogerian research concerned with health patterning of the environment are urgently needed.

Sometime soon wearable computers will undoubtedly save lives, for example, by recognizing a heart attack or injury from a car accident and alerting the EMS. Currently, IBM has software in developmental stages that allows their handheld computer, WorkPad, used with the help of a special server, to access a health records database anytime, anywhere, to obtain a person's history and related information. Researchers are designing the system to include a level of security protecting data and privacy (Rowan Dordick, [www.2.software.ibm.com/casestudies/swcs.nsf](http://www.2.software.ibm.com/casestudies/swcs.nsf)). Beyond Carnegie Mellon's "Flo," the smart home may even serve as a computerized nurse engaged in continuous pattern manifestation knowing of health and well-being and voluntary mutual patterning of information that will be sent silently to the appropriate health provider (Kaku, 1997). In the future, smart cards will store complete health histories and connect to the Internet.

Nevertheless, there is another side to biotechnology that cannot be ignored. Kaku (1997) says, "It is likely that cloning will soon become a fact of life (p. 255)...But the moral dilemmas raised by cloning pale in comparison to those raised by genetic engineering of humans. Cloning only produces a carbon copy of an individual; genetic engineering promises the ability to change the human genome and hence the human race" (p. 227). Rogers was adamant in her opposition to genetic engineering (Personal

communication, 1980, 1991). Will designer children become the 21<sup>st</sup> century edition of the eugenics movement or the Nazi ideology of breeding the master race (Kaku, 1997)? Will interference with the naturally evolving human-environmental mutual process trigger catastrophe?

Unitary nursing revolutionaries should organize now, not wait until after the fact, to initiate think tanks to grapple with these disturbing potentialities. Will unitary scientists assume their role as moral and ethical watchdogs for privacy, freedom of speech, confidentiality, and accountability in science and use of technology? Will unitary artists recognize that technological advances increase the need for the human knowledgeable caring of the real live nurse?

#### **Rogerian Science and the Space Age**

No discussion of Rogerian science in the future would be complete without a discussion of the space age (Rogers, 1992). Rogers held the first conference on Nursing in Space in 1962, seven years before men landed on the moon (Barrett, 1994b). She (1992) enthusiastically proposed that future planetary citizens, including nurses, would be living and working in moon villages and space colonies. One way or another, it is likely that Rogers' science will inform the vision and the reality of the space mission! She maintained that the extraterrestrial and the terrestrial cannot be separated and that Rogerian science provided an explanatory system equally relevant for life and health on earth and in space (Doyle, Racolin, Rogers, & Walsh, 1990). Rogers' theory of accelerating evolution as well as the principles of homeodynamics suggest that if people were to stay in space, they would likely evolve to live comfortably in zero-g. Rogers noted, "It is a fantastic time to be alive since we are on the edge of a new world, just as when life moved out of the waters onto dry land" (Doyle, et al., p. 375). Our transcendent voyage into space begins the next evolutionary phase of humanity:

our transition from humankind to spacekind. Rogers' idea of transcendent unity is "about how a space-directed people change, how the world changes, and how our view of the world changes" (Doyle, et al., p. 375).

Space colonization is not idle speculation. Currently many including Rogerians are joining the worldwide movement to found a space metanation in the year 2000. For \$200 one could have become a charter founder and participant in the Constitutional Convention which will gather global delegates to approve a Declaration of Space Interdependence and the Metanation Constitution (Space Governance, 1997, p. 167). "Space Nursing" was reprinted in *Space Governance: The Journal of United Societies in Space and the World-Space Bar Association* from its original publication in *Cutis*, a dermatology journal (Barrett, 1998c). One can also participate in the Space Nursing Society; President Linda Plush is a founding member, although not a founder, of the Society of Rogerian Scholars. In June 2001, The Society of Rogerian Scholars, the Space Nursing Society, and the American Holistic Nurses Association will cosponsor the next space nursing conference at the Space Center in Huntsville, Alabama.

The Stanford Alumni Association has scheduled December 1, 2001 for the first launching of a vacation trip to outer space for \$98,000 per person (Brooke, 1998). Dan Goldin, Administrator of the National Aeronautics and Space Administration (NASA) "predicts" an orbiting station that is a hotel for later in the century (Brooke, 1997).

NASA wants to go to the next stage of the frontier and put an orbiting telescope a half billion miles from the sun pointing into space within 100 light years of Earth. The purpose is to search those stars for an Earth-like planet. Recently, digitized pictures captured by the Hubble Space Telescope have shown what is believed to be the first image of a planet outside our solar system (Brooke, 1998). It is expected that within



the next 10 years through the international space station we will have figured out how people can safely live and work in space. Then the great adventure of people leaving orbit to go on to other planets will begin (King with Piper, 1998).

### Final Thoughts

Dr. Martha E. Rogers' Science of Unitary Human Beings has been described as visionary, pioneering, brilliant, and radical. This science isn't just a curiosity. It's part of the landscape and it's here to stay; these ideas are right on target for the 21<sup>st</sup> century. In this most exciting of times to be alive, we have the option to fashion a new world of nursing, to put nursing at the hub of the health care universe. That power requires personal and political action from a new generation of Rogers' rebels. Rogers moved her ideas forward by standing up against the establishment. She left her science as a legacy to foster the well-being of all people, sick and well, wherever they may be. What matters now is that we move this science to its rightful place in the world.

The time has come to ask ourselves, as Rogerian nurses, what is our mission statement? It's been said the four rules of life are: show up, pay attention, tell the truth, don't be attached to the results. A few more might be considered for Rogers' rebels: don't belong to choirs where you can't sing your song; give up the myths of helplessness and lack of involvement; and finally, release the fear that prevents passionately speaking our truth with conviction and without anxiety.

We are living in what Rogers called "one world." John Lennon sang in his song, *Imagine*, "Perhaps it's not hard to imagine a world without nations." Perhaps it's not hard to imagine a world health care system founded on a unitary science embracing multiple ways of knowing the unitary person. After all, isn't it a unitary universe?

Ten years ago, Rogers told us, "The 21<sup>st</sup> century will arrive with a plethora of

manifestations of change....Whatever the future of nursing may be, it will be within the context of rapid change, diversity, new knowledge, and new horizons" (Rogers, 1988, pp. 99, 102). Now that the new millennium is here, we might consider: First, how far have we come with the disciplinary imperative to develop knowledge of unitary human beings and their environments? Second, what is the current state of Rogerian science and research application in nursing education and practice? Third, how will we knowingly participate in transforming nursing and health care in the 21<sup>st</sup> century? Lastly, how are we going to get the Science of Unitary Human Beings out of the box?

We might consider as a hint of an answer the wisdom in an Apple Computer ad dedicated to the crazy ones, the likes of Einstein, Ghandi, Buckminster Fuller, and we would add Rogers and other colleagues. It describes them as rebels, rule breakers, change makers, and visionaries. "While some see them as the crazy ones, we see genius. Because the people who are crazy enough to think they can change the world are the ones who do. **THINK DIFFERENT!**" (The New York Times, October 22, 1997, p. D24).

### References

- Andersen, M.D. & Smereck, G.A.D. (1994). In M. Madrid & E.A.M. Barrett, (Eds.), *Rogers' scientific art of nursing practice* (pp. 261-283). New York: National League for Nursing.
- Advertisement for Apple Computers. To the crazy ones. (1997, October 22). *The New York Times*, p. D24.
- Advertisement for Space Metanation (1997). *Space Governance: The Journal of United Societies in Space & The World-Space Bar Association*, 4 (2), 167.
- Barrett, E.A.M. (1990). Rogers' science-based nursing practice. In E.A.M. Barrett, (Ed.), *Visions of Rogers' science-based nursing* (pp. 31-44). New York: National League for Nursing.
- Barrett, E.A.M. (1993). Nursing centers without nursing frameworks: What's wrong with this picture? *Nursing Science Quarterly*, 6, 115-117.

- Barrett, E.A.M. (1994a). Scientists, artists, revolutionaries. In M. Madrid & E.A.M. Barrett, (Eds.), *Rogers' scientific art of nursing practice* (pp. 61-80). New York: National League for Nursing.
- Barrett, E.A.M. (1994b). On the threshold of tomorrow. In V. Malinski & E.A.M. Barrett, (Eds.), *Martha E. Rogers: Her life and her work* (pp. 271-275). Philadelphia: F.A. Davis.
- Barrett, E.A.M. (1998a). A Rogerian practice methodology for health patterning. *Nursing Science Quarterly*, *11*, 136-138.
- Barrett, E.A.M. (1998b). Unique nursing research methods: The diversity chant of pioneers. *Nursing Science Quarterly*, *11*, 94-96.
- Barrett, E.A.M. (1998c). Space nursing. *Space Governance: The Journal of United Societies in Space & The World-Space Bar Association*, *5*, 126-131, 145.
- Brooke, J. (1998, February 17). Ambitious entrepreneurs planning to send tourists into 'Astronaut Altitude'. *The New York Times*, p. A16.
- Cowling, W.R., Barrett, E.A.M., Carboni, J. & Butcher, H. (1997). Unitary perspectives on methodological practices. In M. Madrid, (Ed.), *Patterns of Rogerian knowing*(pp. 47-62). New York: NLN Press.
- Cody, W. (1994). Radical health-care reform: The person as case manager. *Nursing Science Quarterly*, *7*, 180-182.
- Dossey, B. (1997). Letter to the editor. *Beginnings: The Official Newsletter of the American Holistic Nurses Assn.*, *17*(3), 3.
- Doyle, M.B., Racolin, A., Rogers, M.E., & Walsh, P. (1990). A conversation with Martha Rogers on nursing in space. In E.A.M. Barrett (Ed.), *Visions of Rogers' science-based nursing*(pp. 375-386). New York: National League for Nursing.
- Gold, J. (1997). The uniqueness of nursing. *Beginnings: The Official Newsletter of the American Holistic Nurses Assn.* *17*(2), 4.
- Gordon, J. (1998, February). Seven days of breathing, biofeedback, and bonding. *Vegetarian Times*, 64-65.
- Kaku, M. (1997). *Visions: How science will revolutionize the 21<sup>st</sup> century*. New York: Doubleday.
- King, L. with Piper, P. (1994). *Future talk: Conversations about tomorrow*. New York: Harper Collins.
- Luck, S. (1998). "Integrating complementary therapies into clinical practice." Presentation at *Alternative Therapies in Health and Medicine Conference*, San Diego, March 31, 1998.
- Munhall, P.L. (1997). Out of the box. *Image: Journal of Nursing Scholarship*, *29*, 203.
- Nightingale, F. (1959, reprinted 1946). *Notes on nursing*. Philadelphia: Lippincott.
- Parse, R.R. (1994). Martha E. Rogers: Her voice will not be silenced. *Nursing Science Quarterly*, *7*, 47.
- Parse, R.R. (1998). The art of criticism. *Nursing Science Quarterly*, *11*, 43.
- Rawnsley, M. M. (1994). Dwelling in the diffuse: A critical response to Butcher's unitary field pattern portrait research method. In M. Madrid & E.A.M. Barrett (Eds.), *Rogers' scientific art of nursing practice*(pp. 430-435). New York: National League for Nursing.
- Rogers, M.E. (1970). *An introduction to the theoretical basis of nursing*. Philadelphia: F.A.Davis.
- Rogers, M.E. (1988). Nursing science and art; A prospective. *Nursing Science Quarterly*, *1*, 99-102.
- Rogers, M.E. (1992). Nursing science and the space age. *Nursing Science Quarterly*, *5*, 27-34.
- Rogers, M.E. (1994). Quote on cover. *Visions: The Journal of Rogerian Nursing Science*, *2* (1), cover.
- Stevens, W.K. (1998, February 17). Scorned no more, osteopathy is on the rise. *The New York Times*, p. F1, F6.
- Watson, J. (1995). Advanced nursing practice...and what might be. *Nursing & Health Care: Perspectives on Community*, *16*, 78-86.
- Wilford, J.N. (1998, April 21). In the light of dying stars, astronomers see intimations of cosmic immortality. *The New York Times*, p. F1.

A version of this article was presented at the Seventh Rogerian Conference, New York University, June 21, 1998.

Affiliation

Elizabeth Ann Manhart Barrett, RN;PhD;FAAN  
 Professor and Coordinator, Center for Nursing Research  
 Hunter-Bellevue School of Nursing  
 Hunter College of the City University of New York  
 FAX: 212-650-0710  
 eambarrett@att.net

# ENJOY YOUR FLIGHT: HEALTH IN THE NEW MILLENNIUM

Rosemarie Rizzo Parse, RN; PhD

*A version of this paper was given as the keynote address at the Biennial Rogerian Conference, June 2000, at New York University.*

## ABSTRACT

*This article describes views of health in the extant literature and identifies three themes about health from Martha E. Rogers' own words and writings: Health is a value manifest in the human-environment integral field; health is relative well-being; and health is changing potentials. A synthetic definition of health from the Science of Unitary Human Beings is posited by the author for examination and dialogue: Health is the diversifying of unpredictable rhythms in the silent flowing of the human-environment mutual process, as differentiating transformations arise with discrete awareness of preferred possibilities.*

The title "Enjoy Your Flight" arose in one of my many journeys by air. Usually the flight attendant and the pilot say "Enjoy the flight" at the end of their instructions to passengers. A new attendant, clearly reading nervously from her notes, ended her list of do's and don'ts with "Enjoy your flight," and I was jarred from my half-listening dream presence in that this statement shifted a familiar rhythm. Since it was different, I began to think of the meaning of what she said. Of course, it is my flight; my fellow passengers and I are on a journey together, but we are really on our own journey, our own flight—whether flying in a plane or in the day-to-day living of our lives. What is the day-to-day living of our lives? For me it is health.

The purposes of this article are to describe views of health in the extant literature, to identify themes about health from Martha E. Rogers' own words, and to posit a definition of health from a conceptualization

of the Science of Unitary Human Beings.

The idea of health as a unique conceptualization probably arose before the time of Hippocrates. The original meaning of the word comes from the Latin word "hael" and the old English and German terms for sense of being whole (Ayto, 1990). In early Greek medical practice there was a focus on the human's relation to the order of the universe, and health emerged as a virtue reflecting a desired harmony. Much about health has been written, critiqued, and compared over the centuries. In the latter part of the 20<sup>th</sup> century, Judith Smith (1983) distinguished four models of health on a health-illness continuum from her interpretation of the literature up to 1982:

1. Clinical - absence of disease or presence of disease
  2. Role performance - maximum output or failure to perform
  3. Adaptive - adaptation to environment with maximum advantage or alienation from environment with a failure of corrective response
  4. Eudaimonistic - exuberant well-being or languishing debility (p. 31).
- These models have been used as guides

### Key Words

Health, M. E. Rogers,  
Science of Unitary Human  
Beings, Well-being

or standards in healthcare along with the World Health Organization's definition of health as physical, psychological, and social well-being. Health is defined by many authors, such as Smith and the World Health Organization, as a goal to achieve according to certain normative standards. For these authors, there is good and bad health—one can be healthy or not healthy. Yet, there are now many other scholars who view health differently.

Goldstein (1959) describes health as a value chosen by the human. He believes that this value is a characteristic of being human. Consistent with this view is Ferguson's (1980) suggestion of an emergent paradigm of health, the assumptions of which include a view of the whole person, with health related to human values and caring. Frankl (1967), like Ferguson, believes that health is related to values. He believes health emerges as the human continually finds meaning in situations based on value choices. Dubos (1979b) connects the idea of values and attitudes, and says they are related to the human's health and that health itself transcends cause-effect relationships.

Dossey (1982), going further, posits a space-time model of health that specifies health as human connectedness. LeShan (1982) says health is a whole-person phenomenon and healing is a process of the person's total life. Serge King (1981), connecting to LeShan's whole-person phenomenon, says that individuals have only the limitations they agree to have and that health is a choice. Mann (1997) states, "We are living at a time of paradigm shift in thinking about health.... Health as well-being, despite the World Health Organization's definition, lacks more than rudimentary definition" (p. 13). Other authors, too, from various disciplines and in different works continue to foster the emergent view of human health as a reflection of individual choice and value priorities. For example, the following bear witness to the

changing views of health in various disciplines: Chopra's (1989, 1993) view of quantum healing and agelessness; Cousins' (1983, 1989) description of laughing and healing and his views on hope and health; Dacher's (1997) description of healing values; Dossey's (1982, 1984, 1991, 1993) description of meaning and illness and more recently his reports of studies on prayer and healing; Liberman's (1991) view of light therapy; Moyers (1993), who brought new dimensions of health to light with his series on healing and the mind; Bernard Siegel (1989) with his miracle-working with love and healing; Sontag's (1979) insights on metaphor and illness; and Weil's (1995) examples of persons with spontaneous healing.

Newman (1994) defines health as expanding consciousness. She views disease as a manifestation of health; thus, for her, health is a synthesis of disease and nondisease. Justice (1998) views health as well-being. He says that a

number of people are reporting on adult health surveys that they are well, although they, in fact, have a disease, disability, or some other kind of disorder. They do not deny that something is wrong with their bodies, but they perceive themselves as possessing a sense of health, of being well inside themselves at a deeper layer than physical. (p. 61)

The proper measure of health, then, is not the absence of disease, but a sense of well-being (*Healthy People 2000*, 1991). If, says Justice (1998), "well-being is a subjective quality, health under this new construct also becomes a subjective state. Health becomes defined as something we experience—a quality we perceive and assess—rather than an objective assessment of the physical body" (p. 62).

Myers (1992), consistent with Justice (1998), says that well-being is an abiding sense that no matter what the day brings

there is a general sense of contentment. With another perspective, Moch (1998) developed the concept health-within-illness. She defines it as "an opportunity which increases meaningfulness of life through connectedness or relatedness with the environment and/or awareness of self during a state of compromised well-being" (Moch, 1998, p. 305).

While many authors write about well-being, some go further and extend the idea of health to human potential. For example, Dubos (1979a) says that health is "not a state but a potentiality" (p. 395). This is congruent with van Kaam's (1974) view of the whole of human development. He says:

As man I am both a "potentiality" and "emergence...." I experience my potentiality as a dynamic tendency toward self emergence. I am not only what I actually am; I am also a constant movement towards self emergence.... I am becoming. I am the potentiality of dying to my life at any moment and to being born to what I am not yet. (pp. 109-110)

Parse's (1998) view is similar to van Kaam's (1974). Health from Parse's human becoming perspective is not the opposite of disease or a state that the human has but, rather, a continuously changing process that the human cocreates in mutual process with the universe. The idea of changing process incarnates the potentials of the not-yet. Health is a personal commitment that each person lives, incarnating his or her own value priorities (Parse, 1990). The personal commitment is lived through abiding with the struggles and joys of everydayness. The way of abiding with the joys and struggles of everydayness is the choosing of meaning in situations at reflective and prereflective realms of the universe. The choosing of meaning is living the now with the was and the potentials of the not-yet all-at-once. This is health from Parse's view.

Rogers' ideas about health, as evidenced in her speeches and writings, are compatible with others who talk about values, and with Parse's and van Kaam's ideas of potential. Rogers wrote about health in a variety of articles—but only about 30 times. These articles include her comments as a participant in panel discussions during which she spoke about health. She says, "In the human environmental...process we are participants in making possible change directed toward whatever we hope is going to be maximum health" (Rogers, as cited in Huch, 1991, p. 39). Here she reflects on knowing participation in changing health. Rogers (as cited in Huch, 1991) also says:

Health...refers to whatever we mean by the whole, by irreducible human-environment field process manifestations.... The criteria of healthy parts, or unhealthy parts, wouldn't matter—it tells you nothing about the health of the whole.... Whenever I use the term health I am referring only to unitary human beings (p. 35)

and to "health as an irreversible human field manifestation" (Rogers, 1990, p.10). "The term health is very ambiguous...well-being is...much better" (Rogers, 1994e, p. 34).

Rogers continues:

I feel health is a value term that we give to the human-environmental field integral process. Health is relative and it is infinite. In times of exploding acceleration, it changes in its meaning about as fast as we change our clothes, assuming we have some to change. (Rogers, as cited in Huch, 1991, p. 34)

So-called "disease and pathology are value terms applied when the human field manifests characteristics that may be deemed undesirable" (Rogers, 1992, p.33). "Values are continuously changing.... New knowledge revises old views"

(Rogers, 1980/1994d, p. 231).

New perspectives reinterpret observable data. No longer is aging deemed a disease. Pregnancy is not a pathological event. Dying is a developmental process. Evolutionary emergence manifests individual differences that defy old norms.... Interventive modalities are directed toward promotion of health and well-being. [The human] and ... world change together. (Rogers, 1983/1994b, p. 284)

In these writings, Rogers focuses on health as a value and well-being as relative.

Rogers further says:

If the process of life is to be studied and understood, normal and pathological processes must be treated on a basis of complete equality. Health and illness, ease and dis-ease are dichotomous notions, arbitrarily defined, culturally infused, and value laden. The life process possesses its own unity. It is inseparable from the environment. The characteristics of the life process are those of the whole.... Health and sickness, however defined, are expressions of the process of life. Whatever meaning they have is derived out of an understanding of the life process in its totality. Life's deviant course demands that it be viewed in all of its dimensions if valid explanations of its varied manifestations are to emerge. (Rogers, 1970/1994a, pp. 206-207)

"Human health will not be measured by adding up parameters of biological, psychological, and like phenomena" (Rogers, 1986/1994c, p. 295). Here Rogers connects health to the life process as a unity without separating biological, psychological, and sociological entities for the normal and the pathological.

Rogers says, "The science of unitary human beings provides the knowledge for imaginative and creative promotion of the well-being of all people" (Rogers, 1994e, p. 35). "There is nothing in this conceptual model that predicts [the human] will be freed from all 'disease' and live happily ever after" (Rogers, 1980/1994d, p. 231). Rogers further says:

Seeing the world from this viewpoint requires a new synthesis, a creative leap, and the inculcation of new attitudes and values. The goal of health workers and of the public focuses properly on the promotion of health. In a dynamic continuously innovative world, one does not...prevent disease. Rather, in the process of change there are many potentialities, only some of which will be actualized...diversity will be accorded a high value. (Rogers, 1986/1994c, p. 295)

Rogers writes of potentials of individuals, families, and groups. She says, "Potentials are not steady. Potentials are infinite, continuously changing; they are not just a scientific term in my book" (Rogers, as cited in Huch, 1991, p. 34). Here, Rogers focuses on the unitary nature of health as changing potentials.

Rogers says that a different paradigm is a necessary prelude to studying human health and to determining modalities for its promotion on this planet and in outer space. The science of nursing is rooted in this new world view, a pandimensional view of people and their world. (Rogers, 1992, pp. 27-28)

Given Rogers' ideas about health from the Science of Unitary Human Beings, I here posit a new construct and themes about health. The new construct helicy-resonancy-integrality is a unitary phenomenon—meaning that the human-environment field is an innovative, unpredictable mutual process

increasing in diversity with continuous wave pattern frequency change. This unitary phenomenon coherently flows from Rogers' belief that the human pattern is an open pandimensional energy field in continuous mutual process with an open pandimensional environmental field pattern.

Three themes about health arise from this interpretation of the Science of Unitary Human Beings and from a close examination of what Rogers herself says about health:

1. Health is a value manifest in the human-environment integral field.
2. Health is relative well-being.
3. Health is changing potentials.

Health is a value manifest in the human-environment integral field means that pattern reflects knowing participation in placing worth on the tangible and intangible. Value is the chosen pattern of worth. Health is relative well-being means that there are no predefined standardized norms identifying what health is, since it is an uncertain non-static entity. Well-being is defined by the individual. Health is changing potentials means that there is a continuously evolving rhythmical ebb and flow of viable options. Potentials are buds waiting to blossom.

A synthetic definition of health, then, from the Science of Unitary Human Beings, is this: Health is the diversifying of unpredictable rhythms in the silent flowing of the human-environment mutual process, as differentiating transformations arise with discrete awareness of preferred possibilities.

### Summary

In summary, the views of health are changing as manifest in the writings of scholars of the late 20th century. Rogers set forth a unitary view of health as a value, well-being, and potentials in contrast to the particulate view of the predominate medical model of health. A synthetic definition of health from the Science of Unitary Human Beings is posited by this author for examination through dialogue.

So, enjoy your flight—it is really your own value choices, your own definition of well-being, and your own potentials. It is what you decide is worthy in creating you. This is your health, if you believe in the Science of Unitary Human Beings.

### References

- Ayto, J. (1990). *Dictionary of word origins*. New York: Little, Brown.
- Chopra, D. (1989). *Quantum healing*. New York: Bantam.
- Chopra, D. (1993). *Ageless body; timeless mind*. New York: Harmony.
- Cousins, N. (1983). *The healing heart*. New York: Norton.
- Cousins, N. (1989). *Head first: The biology of hope*. New York: E. P. Dutton.
- Dacher, E. (1997). Healing values: What matters in healthcare. *Noetic Sciences Review*, 42, 10-15, 49-51.
- Dossey, L. (1982). *Space, time and medicine*. Boulder, CO: Shambhala.
- Dossey, L. (1984). *Beyond illness: Discovering the experience of health*. Boulder, CO: Shambhala.
- Dossey, L. (1991). *Meaning and medicine: A doctor's tales of breakthrough and healing*. New York: Bantam Books.
- Dossey, L. (1993). *Healing words: The power of prayer and the practice of medicine*. San Francisco: Harper.
- Dubos, R. (1979a). Human ecology. In D. S. Sobel (Ed.), *Ways of health: Holistic approaches to ancient and contemporary medicine* (pp. 387-396). New York: Harcourt Brace Jovanovich.
- Dubos, R. (1979b). Medicine evolving. In D. S. Sobel (Ed.), *Ways of health: Holistic approaches to ancient and contemporary medicine* (pp. 21-44). New York: Harcourt Brace Jovanovich.
- Ferguson, M. (1980). *The Aquarian conspiracy: Personal and social transformation in the 1980's*. Los Angeles: Tarcher.
- Frankl, V. E. (1967). Significance of the meaning of health. In D. R. Belgium (Ed.), *Religion and medicine: Essays on meaning, valuing, and health* (pp. 177-185). Ames: Iowa State University Press.
- Goldstein, K. (1959). Health as value. In A. H. Maslow (Ed.), *New knowledge in human values* (p. 87). Chicago: Henry Regnery.
- Healthy People 2000. (1991). *National Health Promotion and Disease Prevention Objectives*. Washington, DC: U.S. Department of Health and Human Services.
- Huch, M. (1991). Perspectives on health. *Nursing Science Quarterly*, 4, 33-40.

- Justice, B. (1998). Being well inside the self: A different measure of health. *Advances in Mind-Body Medicine*, 14, 43-73.
- King, S. (1981). *Imagining for health*. Wheaton, IL: Theosophical Publishing House.
- LeShan, L. (1982). *The mechanic and the gardener*. New York: Holt, Rinehart, & Winston.
- Liberman, J. (1991). *Light: Medicine of the future*. Santa Fe: Bear.
- Mann, J. (1997). Medicine and public health, ethics and human rights. *Hastings Center Report*, 27(3), 6-13.
- Moch, S. M. (1998). Health-within-illness: Concept development through research and practice. *Journal of Advanced Nursing*, 28(2), 305-310.
- Moyers, B. (1993). *Healing and the mind*. Garden City, NY: Doubleday.
- Myers, D. G. (1992). *The pursuit of happiness: Who is happy—and why*. New York: W. Morrow.
- Newman, M. A. (1994). *Health as expanding consciousness* (2<sup>nd</sup> ed.). New York: National League for Nursing Press.
- Parse, R. R. (1990). Health: A personal commitment. *Nursing Science Quarterly*, 3, 136-140.
- Parse, R. R. (1998). *The human becoming school of thought: A perspective for nurses and other health professionals*. Thousand Oaks, CA: Sage.
- Rogers, M. E. (1990). Nursing: Science of unitary, irreducible human beings: Update 1990. In E. A. M. Barrett (Ed.), *Visions of Rogers' science-based nursing* (pp. 5-11). New York: National League for Nursing.
- Rogers, M. E. (1992). Nursing science and the space age. *Nursing Science Quarterly*, 5, 27-34.
- Rogers, M. E. (1994a). The aims of nursing science. In V. M. Malinski & E. A. M. Barrett (Eds.), *Martha E. Rogers: Her life and her work* (pp. 205-209). Philadelphia: F. A. Davis. (Reprinted from *An introduction to the theoretical basis of nursing*, pp. 83-88, by M. E. Rogers, 1970, Philadelphia: F. A. Davis)
- Rogers, M. E. (1994b). Beyond the horizon. In V. M. Malinski & E. A. M. Barrett (Eds.), *Martha E. Rogers: Her life and her work* (pp. 282-287). Philadelphia: F. A. Davis. (Reprinted from *The nursing profession: A time to speak*, pp. 795-801, by N. L. Chaska, Ed., 1983, New York: McGraw-Hill)
- Rogers, M. E. (1994c). Dimensions of health: A view from space. In V. M. Malinski & E. A. M. Barrett (Eds.), *Martha E. Rogers: Her life and her work* (pp. 292-295). Philadelphia: F. A. Davis. (Paper presented at the University of North Dakota Center for Aerospace Studies Conference on "Law and Life in Space," 1986, Grand Forks, N. D.)
- Rogers, M. E. (1994d). Nursing: A science of unitary man. In V. M. Malinski & E. A. M. Barrett (Eds.), *Martha E. Rogers: Her life and her work* (pp. 225-232). Philadelphia: F. A. Davis. (Reprinted from *Conceptual models for nursing practice*, 2<sup>nd</sup> ed., pp. 329-331, by J. P. Riehl & C. Roy, Eds., 1980, New York: Appleton-Century-Crofts)
- Rogers, M. E. (1994e). The science of unitary human beings: Current perspectives. *Nursing Science Quarterly*, 7, 33-35.
- Siegel, B. S. (1989). *Peace, love, and healing*. New York: Harper & Row.
- Smith, J. A. (1983). *The idea of health: Implementation for the nursing professional*. New York: Teachers College, Columbia University Press.
- Sontag, S. (1979). *Illness as metaphor*. New York: Vintage Books.
- van Kaam, A. (1974). Existential crisis and human development. *Humanitas*, 10(2), 109-126.
- Weil, A. (1995). *Spontaneous healing*. New York: Knopf.

Rosemarie Rizzo Parse, RN; PhD; FAAN  
 Professor and Niehoff Chair  
 Loyola University Chicago  
 320 Fort Duquesne Blvd. #25H  
 Pittsburgh, PA 15222  
 Phone: (412) 261-6452 or (412) 391-8471  
 Fax: (412) 391-8458  
 E-mail: rparse@orion.it.luc.edu



# THE TIME METAPHOR TEST RE-VISITED: IMPLICATIONS FOR ROGERIAN RESEARCH

Juanita Watson, RN; PhD  
Claire M. Sloyan, RN; MS, NPC  
Joffre E. Robalino, RN; BSN

## ABSTRACT

*The construct validity of the Time Metaphor Test (TMT) was evaluated in an effort to answer questions previously raised about the instrument, especially in relation to its use in Rogerian research. A convenience sample of 196 participants was obtained in ambulatory health care and community settings. Scores on the TMT were obtained using the rating scale employed by Allen (1988) and Hastings-Tolsma (1992). No significant relationships were found between the demographic variables and scores on the TMT. Based on the results of factor analyses and assessment of reliability, five items were deleted from the TMT, yielding a 20-item instrument. Additional analyses revealed three orthogonal factors that were comparable to Knapp and Garbutt's (1958) three clusters of time experience. Based on the results of these analyses, a solution that aids in avoiding a linear approach to interpreting scores on the TMT was proposed. Previous Rogerian research employing the TMT was supported.*

The Time Metaphor Test (TMT) (Knapp & Garbutt, 1958) has been used in many Rogerian studies to measure time experience (Allen, 1988; Butcher & Parker, 1988; Ference, 1979; Hastings-Tolsma, 1992; Macrea, 1982, Rawnsley, 1977; Watson, 1993). Despite results supporting hypotheses in some of these studies, Watson (1996) raised questions about the construct validity of the TMT—and about how scores on it have been interpreted in relation to the concept of time experience as elaborated in Rogers' (1970, 1992) Science of Unitary Human Beings. The study reported herein was undertaken in order to seek answers to these questions.

### Purposes and Background of the Study

The purposes of the study were to

**Key Words** Time Metaphor Test,  
Rogerian nursing science

**Received** March, 2000  
**Accepted** June, 2000

(a) identify, through factor analysis, which items on the TMT load substantially enough to be retained on the instrument; (b) determine if the three clusters of time experience identified by Knapp and Garbutt (1958) can be reproduced; and (c) provide an explanation for interpreting scores on the TMT within the context of Rogerian nursing science.

Foremost among the problems with the TMT identified by Watson (1996) was the factorial validity of the instrument. The TMT, when developed by Knapp and Garbutt (1958), consisted of 25 metaphors representing time experience. Using centroid factor analysis without rotation, they identified two factors. Factor I was said to define "a continuum ranging from swift to static [time experience]" (Knapp & Garbutt, p. 430); Factor II was not interpreted. Many of the metaphors had loadings of less than .30 on the two factors (Table 1). Despite these low loadings all 25 items were retained. Knapp and Garbutt then placed the

Table 1.

Clusters of Time Experience (Knapp & Garbutt, 1958) (N = 73)

Metaphor by Cluster	Factor Loadings	
	Factor I	Factor II
<u>Vectorial (V)</u>		
A fast moving shuttle	+ .69	+ .12
A speeding train	+ .66	- .22
A galloping horseman	+ .53	- .37
A fleeing thief	+ .50	- .09
A spaceship in flight	+ .39	- .14
A dashing waterfall	+ .36	+ .14
A whirligig; a pinwheel	+ .36	+ .14
<u>Humanistic (H)</u>		
A devouring monster	+ .15	+ .33
A tedious song	+ .12	+ .24
A large revolving wheel	+ .07	+ .20
A burning candle	+ .06	+ .36
A winding spool	- .05	+ .38
An old man with a staff	- .20	+ .29
A string of beads	- .29	+ .48
An old woman spinning	- .36	+ .31
<u>Oceanic (O)</u>		
Drifting Clouds	- .12	- .20
Wind-driven sand	- .21	- .21
The Rock of Gibraltar	- .33	- .40
Budding leaves	- .34	- .22
A road leading over a hill	- .56	- .08
A quiet, motionless ocean	- .61	- .27
A vast expanse of sky	- .61	- .27
<u>Intermediate (I)</u>		
Marching feet (V-H)	+ .19	+ .14
A bird in flight (V-O)	+ .16	- .31
A stairway leading upward	- .58	+ .14

metaphors on coordinates representing the two factors and identified three clusters of time experience which are currently termed "Vectorial," "Humanistic," and "Oceanic" (Fraser, 1966, p. 587).

The Vectorial cluster included metaphors that had "substantial positive loading on the first factor" (Knapp & Garbutt, 1958, p. 431), whereas the Oceanic cluster included metaphors that loaded negatively on both factors (Table 1). The Humanistic cluster included metaphors that loaded positively on Factor II but had no substantial loadings on Factor I. The Vectorial cluster was positively correlated with n-Achievement (n-Ach); the Oceanic and Humanistic clusters were negatively correlated with n-Ach. The Vectorial cluster was interpreted by Knapp and Garbutt as indicating swift time experience. The Oceanic cluster was interpreted as indicating the slowest time experience. Although a specific interpretation of the Humanistic cluster was not provided, most of the metaphors included in this cluster fell somewhere between the Vectorial and Oceanic clusters on Knapp and Garbutt's first factor. Three metaphors were not included in any of the three clusters; these were identified as occupying intermediate spaces between them.

Rogerian researchers were attracted to Knapp and Garbutt's (1958) instrument because of the three clusters of time experience. In an unpublished handout, Rogers (1979) identified "postulated correlates of unitary human development." Among these was time experience, which she described as a continuum moving from "time drags" to "time races" to "seems timeless" (Rogers, 1979, 1983). Later, Rogers (1985, 1992) renamed these correlates as "manifestations of field patterning in unitary human beings," and designated time experience as moving from "time experienced as slower" to "time experienced as faster" to "timelessness." Despite changes in terminology, three types of time experience were evident

in Rogers' ideas. The TMT, with its three clusters of time experience, provided an approach to measurement. Yet, a detailed examination of the statistics reported by Knapp and Garbutt (1958) in the initial determination of these clusters revealed that they might not be valid constructs (Watson, 1996).

For example, when Watson (1996) inspected the loadings reported by Knapp and Garbutt (1958) for the Oceanic cluster, she found that only five of the seven metaphors loaded negatively on Factor I at greater than .30, and only one of the seven metaphors loaded negatively on Factor II at greater than .30 (Table 1). For the Humanistic cluster, only five of the eight metaphors loaded positively on Factor II at greater than .30. Moreover, Stevens (1986) stated that "in general a variable [should] share at least 15% of its variance with the construct (factor) it is going to be used to help name. This means only using loadings which are about .40 or greater for interpretation purposes" (p. 345). Only nine of the 25 metaphors met this criterion—four Vectorial, one Humanistic, and four Oceanic (Table 1).

Despite statistical evidence that the TMT may not have construct validity, support for hypotheses in Rogerian studies was found when the instrument was used. Rather than assume that both the TMT and the findings from these various studies are invalid, it was decided to conduct a study to determine the validity of the instrument using an adequate sample size and up-to-date methods of factor analysis. Moreover, methods for administering and scoring the TMT, when used in Rogerian research, have varied over the years—as has interpretation of the resulting scores (Watson, 1996). It was thought that the results of the present study may provide some guidance for future use of and interpretation of scores on the TMT.

The research questions were (a) Does the TMT have construct validity? (b) Can the

three clusters of time experience identified by Knapp and Garbutt (1958) be replicated using current methods of factor analysis? (c) What are the relationships between scores on the TMT and selected demographic variables? (d) Is the TMT a valid and reliable measure for use in Rogerian research? and (e) If the TMT is found to be a valid measure of time experience, what are the implications for interpreting scores on the instrument in relation to Rogerian nursing science?

### Method

Sample. The convenience sample consisted of 196 adults living in the Mid-Atlantic region of the US. The initial sample size was 201. When scores on the TMT were reviewed, however, three outliers with scores greater than three standard deviations above the mean were detected. Although there were no statistical outliers with very low scores, two participants had scores of zero and one, respectively, indicating that none of the metaphors resembled their time experience. These two participants also were eliminated from the sample.

The resulting sample size of 196 was sufficient for factor analysis of the TMT. Although Munro and Page (1993) indicate that, for factor analysis, there should be at least 10 participants per variable (i.e., each item on the TMT), they also note that because factor analysis "is based on correlation, 100 to 200 subjects is enough for most purposes" (p. 254). The sample size also was sufficient to detect a medium effect size (.30) at the .05 level of significance with a power of greater than .99 in correlational analysis, two-tailed t-tests, and analysis of variance (ANOVA) (Cohen & Cohen, 1975; Polit & Hungler, 1991).

Instruments. Two instruments were used: (a) a one-page demographic questionnaire and (b) the TMT, using the one-page format employed by Allen (1988) and Hastings-Tolsma (1992). Because validity of the TMT was the major focus of the study,

it will be addressed later in this article. Measures of reliability of the TMT were not reported by Knapp and Garbutt (1958). Wallach and Green (1961) used Kendall's coefficient of concordance to evaluate the degree of agreement among their four study groups (i.e., young males, young females, older males, and older females) in rankings of the metaphors according to the magnitude of loading on their single "swift vs. static" (p. 73) factor. A high level of agreement (.95) was found among the four groups. Ference (1979), who had participants rate only five of the 25 metaphors, applied the Kuder-Richardson 20 to determine reliability. The result was .99.

Allen (1988) and Hastings-Tolsma (1992) had participants rate all items using a 5-point, Likert-type scale. They reported scores and alpha reliabilities according to the three clusters of time experience, with the intermediate metaphors excluded from analysis. Allen, with a sample of 181 adults, found the following alpha reliabilities: Vectorial = .79, Oceanic = .64, and Humanistic = .62. Hastings-Tolsma, with a sample of 173 adults, reported alpha reliabilities as follows: Vectorial = .82, Oceanic = .63, and Humanistic = .60. Both investigators indicated that the low cluster reliabilities may have been due to the fact that each cluster contained less than 10 items. In the present study ( $N = 196$ ), participants rated all items using Allen's (1988) and Hastings-Tolsma's (1992) 5-point scale. The resulting alpha reliability, with all items on the instrument included in analysis, was .7505.

Procedure. Data were collected in ambulatory health care settings such as primary care providers' offices and in community settings such as older adult centers, churches, and adult civic organizations. Individuals who agreed to participate were given a letter explaining the study and copies of the two instruments. The letter included explanation about the rights of the research participants and how confidential-

ity would be protected. Consent was indicated by returning the completed (or partially completed) instruments to the researchers.

Approximately 450 questionnaires were distributed. Of these, 212 were returned. Eleven were eliminated from analysis because the participants were unable to complete either the demographic questionnaire, the TMT, or both. As noted previously, five additional participants were subsequently eliminated because of high outlier scores or because their low scores indicated none of the metaphors resembled their time experience.

Scoring. As Watson (1996) has noted, the approach to administering and scoring the TMT developed by Knapp and Garbutt (1958) has been found to be laborious and problematic by many researchers. Therefore, the method employed by Allen (1988) and Hastings-Tolsma (1992) was used instead. The alternative method yields more data per item on the TMT (Allen, 1988).

Allen (1988) was the first to apply a five-point rating scale to each metaphor, and participants rated each item independently of the others. Possible scores for each metaphor ranged from 0 to 4. A score of 4 was assigned to metaphors rated as definitely resembles my sense of time, whereas a score of zero was assigned to metaphors rated as definitely does not resemble my sense of time. Scores of 3 and 1, respectively, were assigned to rating of probably resembles my sense of time and probably does not resemble my sense of time. A score of 2 was assigned to metaphors rated undecided. The range of possible scores was 0 to 100.

In contrast to Allen's (1988) and Hastings-Tolsma's (1992) studies, in which scores were reported in relation to the clusters of time experience, in the current study total scores on the TMT were used to identify outliers and to report summary statistics on and overall reliability of the

instrument. Scores on the individual metaphors were used for factor analysis.

Data Analysis Procedures. Data were analyzed using the Statistical Package for the Social Sciences (SPSS for Unix, 1993).

## Results

Characteristics of the Sample. The sample consisted of 71 men (36.2%) and 125 women (63.8%), aged 19 to 84 years ( $M = 47.76, SD = 15.78$ ). The majority of the participants were married (59.7%) and indicated their race as Caucasian (87.7%). Health was rated as excellent or good by 83.7% of the participants and most (66.3%) were satisfied with their sleep patterns. The remaining demographic variables of occupation, education, and income were distributed evenly across the sample.

Scores on the TMT. Scores on the TMT for the 196 participants ranged from 5 to 78 ( $M = 41.75, SD = 12.76$ ). The median was 41.0, the mode was 39.0, and no excessive skewness or kurtosis was noted. Possible relationships between scores on the TMT and the demographic variables were evaluated using a t-test for gender, correlation for age, and ANOVA for the remaining variables. No statistically significant relationships were found.

Factor Analysis of the TMT. The initial principal components factor analysis with varimax rotation revealed eight factors with eigenvalues greater than 1.0; the percentage of variance accounted for by these eight factors was 61.8%. A scree test (Stevens, 1986) was applied to determine the number of factors to retain. It was ascertained that a 2- to 4-factor solution would be sufficient. A 2-factor solution would account for 30.9% of the variance, whereas a 4-factor solution would account for 43.4%. In addition, a 3-factor solution was evaluated to see if Knapp and Garbutt's (1958) three clusters could be elicited. This latter solution would account for 37.3% of the variance.

In the 2- and 3-factor solutions with

varimax rotation, 21 items loaded at .40 or greater, with the exceptions of (a) "a road leading over a hill," (b) "a stairway leading upward," (c) "a large revolving wheel," and (d) "a string of beads." In the 4-factor solution with varimax rotation, 23 items loaded at .40 or greater on the four factors with the exceptions of (a) "a winding spool" and (b) "stairway leading upward." In addition, "a whirligig; a pinwheel" loaded at greater than .40 on both the first and fourth factors.

These results were evaluated in relation to the reliability analysis, which indicated that the reliability of the TMT would be improved if five items were deleted: (a) "a road leading over a hill," (b) "budding leaves," (c) "a quiet, motionless ocean," (d) "drifting clouds," and (e) "a string of beads." When these five items were deleted from analysis, the reliability increased from .7505 to .7809. Principle components factor analysis with varimax rotation revealed five factors with eigenvalues greater than one, but a clear pattern of factors did not emerge in this analysis, nor in the forced 2-, 3-, and 4-factor solutions with varimax rotation. Other solutions were attempted in which items were deleted from analysis either to improve reliability or because of low loadings on previous analyses. On factor analysis, however, a clear pattern of factors also did not emerge.

Finally, a solution was attempted in which the following five items were deleted from analysis: (a) "a road leading over a hill," (b) "a string of beads," (c) "a large revolving wheel," (d) "a stairway leading upward," and (e) "a winding spool." Previous analyses had indicated that reliability of the TMT would be improved if the first two items were deleted. In addition, in the analyses with all 25 items included, none of the first four metaphors loaded at .40 or greater in the forced 2- and 3-factor solutions, and the latter two did not load in the forced 4-factor solution. The reliability of the instrument

with the five items deleted was .7399.

More important, on factor analysis, a clear pattern emerged. Five factors with eigenvalues greater than one were obtained and accounted for 55.6% of the variance. Forced 2-, 3-, and 4-factor solutions were then attempted. Of these, the 2- and 3-factor solutions offered the best approaches to explaining the construct validity of the TMT; in the 4-factor solution, only two metaphors loaded on the fourth factor.

In the 2-factor solution, Factor 1 consisted of 11 metaphors; all seven of the metaphors identified by Knapp and Garbutt (1958) as belonging to the Vectorial cluster, one each from the Humanistic and Oceanic clusters, and two Intermediate metaphors (Table 2). The variance accounted for by this factor was 22.2%, and the reliability of the factor was .8407. Factor 2 consisted of nine metaphors: four from the Humanistic cluster and five from the Oceanic cluster. The variance accounted for by this factor was 14.4%, and the reliability of the factor was .7136.

In the 3-factor solution, Factor 1 was the same as that in the 2-factor solution (Tables 2 & 3). Factor 2 consisted of five metaphors: four from the Oceanic cluster and one from the Humanistic cluster. The variance accounted for by this factor was 14.4%, and the reliability of the factor was .6916. Factor 3 consisted of four metaphors: three from the Humanistic cluster and one from the Oceanic cluster. The variance accounted for by this cluster was 7.6%, and the reliability of the factor was .5905. Details of the preceding factor analyses, along with the rationale for deleting five items from the TMT, are presented in a separate article (Watson, Sloyan, & Robalino, in preparation).

Additional Analyses. The distribution of scores on the TMT, with the five items deleted, was then re-analyzed. The theoretical range of scores was 0 to 80, and the actual range was 2 to 64 ( $M = 3.07$ ,  $SD =$

11.11, median = 33.00, mode = 31.00). No outliers were detected, nor was there any excessive skewness or kurtosis. The low score of two was of some concern, however, an inspection of this participant's responses to all 25 items on the TMT indicated that three metaphors rated by the participant had been deleted from analysis. It was concluded that this individual's responses to the remaining items were valid. Further, when scores on the 20-item version of the TMT were compared with the demographic variables, no statistically significant relationships were found.

### **Discussion and Conclusions**

The preceding analyses indicate that Knapp and Garbutt's (1958) three clusters of time experience can, for the most part, be replicated as three separate factors if items that reduce reliability or do not load saliently on factor analysis are deleted.

Evaluation of Factors Elicited. The 3-factor solution was compared with Knapp and Garbutt's (1958) original three clusters (Tables 1 & 3). As noted, Factor 1 included all of the Vectorial metaphors, one metaphor each from the Humanistic and Oceanic clusters, and two Intermediate metaphors. The data reported by Knapp and Garbutt, as well as by Wallach and Green (1961), about the four non-Vectorial metaphors that loaded on Factor 1 were reviewed in an effort to find an explanation for the loadings in the present analysis.

The Humanistic metaphor, "a devouring monster," that loaded on Factor 1 along with the Vectorial metaphors in the present study, was discussed by Knapp and Garbutt (1958) as a "possible anomaly" (p. 429). They noted that this metaphor suggests "some sort of motion" (Knapp & Garbutt, p.429), yet its highest positive loading was on their second factor, and it was negatively correlated with n-Ach. It was, therefore, assigned to the Humanistic cluster. The results of the present study confirm Knapp and Garbutt's initial ideas

Table 2.

Two-Factor Solution with Five Items Deleted (N = 196)

Factor	Metaphor	Loading	Cluster <sup>a</sup>	Rank <sup>b</sup>	
1	A dashing waterfall	.7056	V	7	
	A fleeing thief	.6956	V	4	
	A fast moving shuttle	.6833	V	1	
	A speeding train	.6714	V	2	
	A devouring monster	.6702	V	9	
	A galloping horseman	.6541	V	3	
	A space ship in flight	.6449	V	6	
	A whirligig; a pinwheel	.5908	V	5	
	Marching feet	.5107	I (V-H)	11	
	A bird in flight	.4918	I (V-O)	8	
	Wind-driven sand	.4594	O	13	
	Eigenvalue	4.444			
	Variance accounted for (%)	22.2			
	Factor reliability	.8407			
2	A vast expanse of sky	.6618	O	25	
	Drifting clouds	.6317	O	21	
	A quiet, motionless ocean	.5802	O	24	
	An old man with a staff	.5752	H	19	
	Budding leaves	.5647	O	18	
	A burning candle	.5154	H	16	
	The Rock of Gibraltar	.4807	O	22	
	An old woman spinning	.4384	H	15	
	A tedious song	.4104	H	14	
		Eigenvalue	2.875		
		Variance accounted for (%)	14.4		
	Factor reliability	.7136			

<sup>a</sup>Clusters identified by Knapp & Garbutt (1958); V = Vectorial, H = Humanistic, O = Oceanic, I = Intermediate.

<sup>b</sup>Rank order of loadings on Wallach & Green's (1961) "Swift vs. Static" (p. 73) factor (see Table 4).

Table 3.

Factors 2 and 3 in the Three-Factor Solution with Five Items Deleted (N = 196)

Factor	Metaphor	Loading	Cluster <sup>a</sup>	Rank <sup>b</sup>
2	Drifting clouds	.8053	O	21
	A quiet, motionless ocean	.6959	O	24
	A vast expanse of sky	.6338	O	25
	A burning candle	.5429	H	16
	Budding leaves	.4615	O	18
	Eigenvalue	2.875		
	Variance accounted for (%)	14.4		
	Factor reliability	.6916		
3	An old man with a staff	.7409	H	19
	A tedious song	.6343	H	14
	The Rock of Gibraltar	.6008	O	22
	An old woman spinning	.5455	H	15
	Eigenvalue	1.5255		
	Variance accounted for (%)	7.6		
	Factor reliability	.5905		

<sup>a</sup>Clusters identified by Knapp & Garbutt (1958); V = Vectorial, H = Humanistic, O = Oceanic.

<sup>b</sup>Rank order of loadings on Wallach & Green's (1961) "Swift vs. Static" (p. 73) factor (see Table 4).

about this metaphor, and it is posited that it simply represents the experience of time passing swiftly.

An unexpected finding was the loading of "wind-driven sand" on Factor 1. In Knapp and Garbutt's (1958) analysis, this metaphor was assigned to the Oceanic cluster because it had negative loadings on both of their factors (Table 1) and was negatively correlated with n-Ach. In Wallach and Green's (1961) study, this item loaded at -.06 on their single factor and is 13th when the items are ranked from swiftest to

slowest (Table 4). In contrast, four of the seven Oceanic metaphors occupy the ranks of 21 to 25. A possible explanation for this metaphor's loading is that, depending upon how one interprets "wind-driven sand," it could be argued that the metaphor connotes a sense of time passing swiftly, not slowly.

The two intermediate metaphors that loaded on Factor 1 in this analysis, "marching feet" and "a bird in flight," were so designated by Knapp and Garbutt (1958) because they did not meet their criteria for inclusion in any of the clusters. Both had



positive loadings on their first factor. "Marching feet" also had a low positive loading on their second factor, whereas "a bird in flight" loaded negatively on it (Table 1).

Wallach and Green (1961) presented the metaphors loading on their single "swift vs. static" (p. 73) factor in order of highest (i.e., most positive) to lowest (i.e., most negative) loadings (Table 4) for the total sample ( $N = 278$ ). All of their top 13 metaphors loaded on Factor 1 in the present study, including the two intermediate metaphors. The only exceptions were the two metaphors deleted from analysis ("a large revolving wheel" and "a winding spool"). It was concluded that Factor 1 represents time passing swiftly and is comparable to the Vectorial cluster identified by Knapp and Garbutt (1958).

All of the items that loaded on Factor 2 in the 2-factor solution were from the Humanistic and Oceanic clusters (Tables 1 & 2) and were the same as those ranked 14 through 25 on Wallach and Green's (1961) single factor (Table 4). Knapp and Garbutt (1958) stated that the Oceanic and Vectorial clusters did not "differ significantly" (p. 432), based on the correlations with n-Ach. Thus, the finding that these metaphors loaded on the same factor in the 2-factor analysis was not too surprising.

In the 3-factor solution, the metaphors that loaded on Factors 2 and 3 were the same as those that loaded on Factor 2 in the 2-factor solution (Tables 2 & 3). Factor 2 in the 3-factor solution was comprised of four Oceanic metaphors and one Humanistic metaphor, whereas Factor 3 was comprised of three Humanistic metaphors and one Oceanic metaphor.

A detailed explanation for why the Oceanic metaphor, "the Rock of Gibraltar," and the Humanistic metaphor, "a burning candle," fell outside of their respective clusters is provided in a separate article (Watson, Sloyan, & Robalino, in preparation). Briefly, Knapp and Garbutt (1958)

noted that both metaphors "do not involve precipitate swiftness" (p. 428), yet they were positively correlated with n-Ach which was not a criterion for inclusion in the Humanistic and Oceanic metaphors. "The Rock of Gibraltar" was apparently assigned to the Oceanic cluster because of its negative loadings on both of Knapp and Garbutt's factors (Table 1) and because it involved "an image drawn from nature" (Knapp & Garbutt, 1958, p. 431). "A burning candle," on the other hand, was assigned to the Humanistic cluster because of its positive loading on the second factor and because a candle is a "human artifact" (Knapp & Garbutt, 1958, p. 431).

The results of the present study confirm Knapp and Garbutt's (1958) original ideas about "the Rock of Gibraltar" as connoting slow or static time experience. This metaphor, however, does not connote the type of time experience associated with the Oceanic cluster, nor does it fit their description of the Humanistic cluster. It is posited that Knapp and Garbutt neither named nor interpreted the "Humanistic" cluster correctly. For example, they also included "a devouring monster" in this cluster.

In contrast, "a burning candle" fit the description of metaphors in the Oceanic cluster better than that of the Humanistic cluster. Although a candle is not an image "drawn from nature" (Knapp & Garbutt, 1958, p. 431), if one watches a candle burn, he or she might observe that candles generally burn slowly. One can be encompassed by the candle's warm glow. It is suggested, however, that for the sake of clarity, this metaphor should be stated as a "slowly burning candle." It could be argued that adding "slowly" to this metaphor might bias responses, however, other metaphors have similar qualifiers (e.g., "a fast moving shuttle" and "a speeding train").

It was concluded that the three factors elicited in this study are comparable to Knapp and Garbutt's three clusters of time

experience. Factor 1 represents time passing swiftly, and is, in essence, the Vectorial cluster. Factor 2 represents a non-directional passive sense of time experience and is comparable to the Oceanic cluster. Factor 3 represents slow or static time experience and is comparable to the Humanistic cluster. No intermediate metaphors were identified; all the metaphors retained in analysis loaded at greater than .40 on one of the three factors.

Factor Reliabilities. The factor reliabilities from the 3-factor solution (Table 3) were compared with those reported for the three clusters of time experience by Allen (1988) and Hastings-Tolsma (1992). The reliability of Factor 1 was .8407. In Allen's and Hastings-Tolsma's studies, the reliabilities of the Vectorial cluster were .79 and .82, respectively. The reliability of Factor 2 was .6916. In Allen's and Hastings-Tolsma's studies, the reliabilities of the Oceanic cluster were .64 and .63, respectively. The reliability of Factor 3 was .5905. In Allen's and Hastings-Tolsma's studies, the reliabilities of the Humanistic cluster were .62 and .60, respectively. Although more items are included in Factor 1 than in the Vectorial cluster, fewer items are included in Factors 2 and 3 than in the Oceanic and Humanistic clusters, respectively. Comparable reliabilities were obtained, however, for these latter two factors. Moreover, the sample size of the current study ( $N = 196$ ) is comparable to those of Allen's ( $N = 181$ ) and Hastings-Tolsma's ( $N = 173$ ) studies.

Research Questions. The preceding analysis answers the first four research questions. The TMT does have construct validity if five metaphors that do not contribute to either validity, reliability, or both are deleted. The three clusters of time experience identified by Knapp and Garbutt (1958) can be closely replicated using current methods of factor analysis. There were no relationships between any of the demographic variables and total scores on the

TMT. This finding supports the use of the TMT in Rogerian research, because particular variables such as those included on the demographic questionnaire should not have any relationships to a person's time experience. Thus, with the modifications proposed herein, the TMT is a valid and reliable instrument for use in Rogerian research.

This leads to the fifth research question: What are the implications for interpreting scores on the TMT in relation to Rogerian Nursing Science? Watson (1996) identified problems with interpreting scores on the TMT, especially after Macrae (1982) suggested that the metaphors in the Oceanic cluster were "descriptive of the experience of timelessness" (p. 8), which in Rogers' (1992) *Science of Unitary Human Beings* is the fastest experience of time passing. With this re-interpretation, the Vectorial cluster became associated with time racing (Rogers, 1979, 1983) and time experienced as faster (Rogers, 1985, 1992). The Humanistic cluster then became associated with the slowest time experience. However, in both Knapp and Garbutt's (1958) and Wallach and Green's (1961) studies, loadings on the Humanistic cluster fell, for the most part, between those of the Oceanic and Vectorial clusters (Tables 1 & 4). It was not clear, based on these factor analyses, how this cluster could be related to Rogers' concept of time dragging or experienced as slower.

The current study provides a solution to this dilemma through the identification of three separate factors that are comparable to Knapp and Garbutt's (1958) three clusters of time experience (Tables 1, 2, & 3). These factors are orthogonal; therefore they do not need to be explained in relation to a single continuum of time experience that cannot be related to Rogers' (1992) ideas. It is suggested, however, that the three clusters of time experience elicited in this study be re-named to be consistent with Rogerian nursing science. Thus, it is proposed that Factor 1 be named "Time Expe-

Table 4.

Factor Loadings and Rank Order of Metaphors on Wallach and Green's (1961) "Swift vs. Static" (p. 73) Factor (N = 278)

Metaphor	Cluster	Factor Loading	Rank Order
A fast moving shuttle	V	+.76	1
A speeding train	V	+.74	2
A galloping horseman	V	+.69	3
A fleeing thief	V	+.65	4
A whirligig; a pinwheel	V	+.61	5
A space ship in flight	V	+.57	6
A dashing waterfall	V	+.44	7
A bird in flight	I (V-O)	+.43	8
A devouring monster	H	+.38	9
A large revolving wheel	H	+.31	10
Marching feet	I (V-O)	+.23	11
A winding spool	H	+.16	12
Wind-driven sand	O	-.06	13
A tedious song	H	-.18	14
An old woman spinning	H	-.23	15
A burning candle	H	-.36	16
A string of beads	H	-.38	17
Budding leaves	O	-.42	18
An old man with a staff	H	-.44	19
A stairway leading upward	I (H-O)	-.44	20
Drifting clouds	O	-.46	21
The Rock of Gibraltar	O	-.50	22
A road leading over a hill	O	-.54	23
A quiet, motionless ocean	O	-.63	24
A vast expanse of sky	O	-.68	25

<sup>a</sup>Clusters identified by Knapp & Garbutt (1958); V = Vectorial, H = Humanistic, O = Oceanic, I = Intermediate.

rienced as Faster," Factor 2 be named "Timelessness," and Factor 3 be named "Time Experienced as Slower" (Rogers, 1992, p. 31). It is noted that Paletta (1988, 1990) used Rogers' (1979, 1983) initial terms for the three factors she elicited in her

Temporal Experience Scales, an instrument she developed to measure time experience consistent with Rogerian nursing science. The factor names proposed herein represent Rogers' (1985, 1992) most recent designations.

Paletta's (1990) definitions of the three types of time experience could, however, be applied to the three factors elicited in the present study. She defined the experience of Time Dragging "as slow, boring, tedious, leaden, or dull" (Paletta, p. 241). Time Racing had to do with temporal experience that is "immediate, swift, rhythmic, rapid, beating, or fluctuating" (Paletta, p. 241), whereas the experience of Timelessness is "infinite, never ending, flowing, continual, or limitless" (Paletta, p. 241).

The three factors that Paletta (1988, 1990) elicited in her instrument consisted of eight items each. Therefore, the factor reliabilities for the Timelessness (.791) and Time Dragging (.821) factors were higher than those elicited for Factor 2 (.6916, 5 items) and Factor 3 (.5905, 4 items) in the current study. It is also noted that she found that gender and occupation had significant effects on all three of her time experience scales in the instrument development study. Moreover, 96.5% of the sample ( $N = 305$ ) in the instrument development study were ages 50 or younger, and the sample ( $N = 120$ ) in her main study was limited to female graduate nursing students, ages 20 to 40 (Paletta, 1988). It is beyond the scope of this article to provide a full discussion of Paletta's instrument. Rather, the aims of the current study included validating the findings of previous Rogerian research in which the TMT was used, as well as addressing issues about interpreting scores on the TMT.

Phillips (1989) has suggested that, in order "to eliminate perceived linearity" (p. 58), manifestations of human field patterning such as time experience should not be viewed as "three separate columns" (p. 59). Building on these ideas, Phillips (1997) gave examples of how time experience might vary from person to person. "[One person] can have a resonating wave frequency pattern manifesting time experienced as slower and time experienced as faster, while [another person] can have a resonat-

ing wave frequency pattern that manifests time experienced as slower and timelessness" (p. 19).

An approach to scoring that reflects Phillips' (1989, 1997) ideas would be to use factor scores, in which "an individual's score on each variable (e.g., each metaphor on the TMT) included in a factor is multiplied by the factor loading for the particular variable" (Munro & Page, 1993, p. 258). Because factor scores are "based on the strength of the correlation of each variable with the factor, . . . the factor score [indicates] the relative 'importance' of each variable" (Munro & Page, p. 258). Allen's (1988) and Hastings-Tolsma's (1992) approach of having participants rate each item in relation to a Likert-type scale makes reporting factor scores possible. Although scores would be reported in relation to the three clusters of time experience, the relative importance of each cluster would be more precisely elucidated. This approach could be most useful when the relationships of time experience and other variables identified as indicating Rogers' (1992) manifestations of human field patterning are being explored.

One of the most important questions answered through the current study is, Why have hypotheses in Rogerian studies in which the TMT was used been supported? The authors propose that hypotheses have been supported because most of the items on the TMT were found to contribute to the construct validity of the instrument as initially developed. Only five of 25 items were deleted in the final analysis, and the basic structure of the three clusters of time experience was supported in the present study. It is posited that the metaphors that actually contribute to the validity and reliability of the TMT—as found in this study—were sufficient to support hypotheses in previous studies, and that those that contributed little or nothing to the validity and reliability of the instrument had a negligible effect in data

analysis. Thus, there is no reason to say that the results of previous Rogerian studies in which the TMT was used are invalid.

### Summary and Recommendations

The Time Metaphor Test, if used in modified form based on the results of this study, can remain an important instrument for use in Rogerian research. Construct validity of the TMT has been established through factor analysis, and three orthogonal factors have been elicited. The instrument has been found to have acceptable reliability, even with the deletion of five metaphors. Issues identified with scoring and interpretation of scores have been addressed, especially in relation to newer interpretations of Rogers' (1992) manifestations of human field patterning (Phillips, 1989, 1997). Previous Rogerian research in which the TMT was used has been supported.

It is recommended that the clusters of time experience be renamed to be consistent with Rogerian theory. It also is recommended that Allen's (1988) and Hastings-Tolsma's (1992) approach of applying a Likert-type rating scale to each metaphor be retained when the modified TMT is used, both for ease of participant use and to yield more data per item on the TMT (Allen, 1988). With this approach, scores on the TMT could be reported as a total score, cluster scores, or factor scores, depending upon the nature of the variables under study in a given project. Based on Phillips' (1989, 1997) suggestions on avoiding a linear view of the manifestations of human field patterning, factor scores may offer the best method for reporting scores. The findings of the current study support this approach, because the clusters of time experience were elicited as three separate factors as opposed to what was essentially a single continuum from swift to static time experience. Factor scores would aid in determining the importance of each cluster in relation to participants' experiences of time passing.

It is recommended that "slowly" be added to the metaphor, "a burning candle." Consideration also should be given to identifying additional metaphors that could be included in the second and third factors elicited in this study (i.e., "Timelessness" and "Time Experienced as Slower") so that the number of metaphors contributing to each factor is roughly equivalent. Finally, the study should be replicated, using the modified 20-item instrument, with a sample that is more balanced in relation to gender and more heterogeneous with respect to marital status and race, to determine if the factors elicited in this study can be reproduced.

### References

- Allen, V. L. R. (1988). *The relationships of time experience, human field motion, and clairvoyance: An investigation in the Rogerian conceptual framework*. Unpublished doctoral dissertation, New York University, New York.
- Burns, N., & Grove, S. K. (1987). *The practice of nursing research: Conduct, critique, and utilization*. Philadelphia: Saunders.
- Butcher, H. K., & Parker, N. I. (1988). Guided imagery within Rogers' Science of unitary human beings: An experimental study. *Nursing Science Quarterly, 1*, 103-110.
- Cohen, J., & Cohen, P. (1975). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, NY: Lawrence Erlbaum Associates.
- Ference, H. M. (1979). *The relationships of time experience, creativity traits, differentiation, and human field motion*. Unpublished doctoral dissertation, New York University, New York.
- Fraser, J. T. (1966). *The voices of time*. New York: George Braziller.
- Hastings-Tolsma, M. T. (1992). *The relationship of diversity of human field pattern to risk-taking and time experience: An investigation of Rogers' principles of homeodynamics*. Unpublished doctoral dissertation, New York University, New York.
- Knapp, R. H., & Garbutt, J. T. (1958). Time imagery and the achievement motive. *Journal of Personality, 26*, 426-434.
- Macrae, J. (1982). *A comparison between meditating subjects and non-meditating subjects on time experience and human field motion*. Unpublished doctoral dissertation, New York University, New York.

- Munro, B. H., & Page, E. B. (1993). *Statistical methods for health care research (2<sup>nd</sup> ed)*. Philadelphia: Lippincott.
- Paletta, J. L. (1988). *The relationship of temporal experience to human time*. Unpublished doctoral dissertation, New York University, New York.
- Paletta, J. L. (1989). The relationship of temporal experience to human time. In E. A. M. Barrett (Ed.), *Visions of Rogers' science-based nursing* (pp. 239-253). New York: National League for Nursing.
- Phillips, J. R. (1989). Science of unitary human beings: Changing research perspectives. *Nursing Science Quarterly*, 2, 57-60.
- Phillips, J. R. (1997). Evolution of the science of unitary human beings. In M. Madrid (Ed.), *Patterns of Rogerian Knowing* (pp. 11-27). New York: National League for Nursing.
- Polit, D. F., & Hungler, B. P. (1991). *Nursing research: Principles and methods* (4<sup>th</sup> ed.). Philadelphia: Lippincott.
- Rawnsley, M. M. (1977). *The relationship between the perception of the speed of time and the process of dying: An empirical investigation of the holistic theory of nursing proposed by Martha Rogers*. Unpublished doctoral dissertation, Boston University, Boston.
- Rogers, M. E. (1970). *An introduction to the theoretical basis of nursing*. Philadelphia: Davis.
- Rogers, M. E. (1979). *Postulated correlates of unitary human development*. Unpublished manuscript, New York University, New York.
- Rogers, M. E. (1983). *Postulated correlates of patterning in unitary human beings*. Unpublished manuscript, New York University, New York.
- Rogers, M. E. (1985). *Manifestations of field patterning in unitary human beings*. Unpublished manuscript, New York University, New York.
- Rogers, M. E. (1992) Nursing science and the space age. *Nursing Science Quarterly*, 5, 27-34.
- SPSS for Unix, Release 6.1 [Computer software]. (1993). Chicago:SPSS.
- Stevens, J. (1986). *Applied multivariate statistics for the social sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Wallach, M. A., & Green, L. R. (1961). On age and the subjective experience of time. *Journal of Gerontology*, 16, 71-74.
- Watson, J. (1993). *The relationships of sleep-wake rhythm, dream experience, human field motion, and time experience in older women*. Unpublished doctoral dissertation, New York University, New York.
- Watson, J. (1996). Issues with measuring time experience in Rogers' conceptual model. *Visions: The Journal of Rogerian Nursing Science*, 4, 31-40.

Juanita Watson, RN;PhD  
The Parkview A-103  
Collingswood, NJ 08107  
Home Phone: (856)858-7043  
Assistant Professor of Nursing  
School of Nursing  
Widener University

Claire M. Sloyan, RN;MS,NPC  
Adult Nurse Practitioner  
Ocean County, NJ

Joffre E. Robalino, RN;BSN  
Staff Nurse, Emergency Department  
Cooper Hospital/University Medical Center  
Camden, NJ  
and  
Student, School of Osteopathic Medicine  
University of Medicine and Dentistry of New Jersey  
Stratford, NJ 08084

## BOOK REVIEW COLUMN

Pat Christensen, RN, PhD

### FROM FLATLAND TO CYBERSPACE: REFLECTIONS ON ROGERIAN SCIENCE AND CONTEMPORARY MEDIA

#### A Review of Rachel Naomi Remen's *Kitchen Table Wisdom: Stories that Heal*

Most Rogerian scholars will find Remen (1996) to be a kindred spirit. She has written a book that celebrates healing and connectedness as integral to human health and happiness. The book has nine chapters with very short, compelling stories or vignettes illustrating the concepts of healing and full participation in life.

Remen is a traditionally educated physician who has embraced the concept of the physician as healer versus the physician as technician. She has experienced suffering and chronic illness (severe colitis which resulted in an ileostomy) and shares the perspectives of both patient and doctor.

The title *Kitchen Table Wisdom* comes from Remen's childhood memories of family and friends sitting around the kitchen table telling their stories. She writes, "The kitchen table is a level playing field. Everyone's story matters. The wisdom in the story of the most educated and powerful person is often not greater than the wisdom in the story of a child, and the life of a child can teach us as much as the life of a sage" (p. xxvi).

Parallels to Rogerian science can be found in several of the kitchen table stories. For example, in "Choose Life!," Remen recounts the story of a woman who was in such a depression after the death of her lover that she was barely able to function. She described her state as if she had "swallowed her own energy . . ." and created a

"closed system" (p. 196). In considering the woman's description, Remen noted that the concept of energy, sometimes referred to as chakra energy open to the environment, has persisted in human cultures for countless ages. The idea of energy as survival seems to be integral to human experience.

In "Damming The River," Remen describes energy and pattern in a lucid, easy to understand way. Pattern, a concept that is often difficult for beginning Rogerian scholars to comprehend, is vital to the understanding of manifestations of energy. The persistent pain Remen herself suffered, growing very angry as a result, had consumed her. In a moment of insight, she discovered that the anger was connected to her will to live. Her anger had helped her to survive and to fight on. Later, Remen learned that there was a theoretical basis for her experience. In a class on Aryurvedic medicine, she learned that there is a difference between energy and energy pattern, the container through which a person's life energy is flowing at any given moment. "The energy form (or pattern) is anger or sorrow or joy or disappointment, but the energy itself is the chi, or the life force" (p. 31).

Referring to a hospitalization episode of her own, Remen in "Embracing Life" told how all the plants that she received from friends and family had died. As she lay in bed and looked at the dying plants she had to wonder, if the plants could not survive in the hospital environment, how was she to get better herself?

I had always assumed that a hospital was a healing environment. . . . All hospitals look, feel, and even smell the same. Once you are inside a hospital you cannot tell whether you are in Maine or in Mississippi. I had always thought that this was an example of high standards and quality control. I now know that it is the reflection of the lack of connection between most hospital environments

and the natural world around them. This sort of disconnection from the natural world weakens everyone. (p. 207)

A key concept in Rogerian science is the mutual process of human and environmental energy fields. Rogers (Personal communication, 1987) frequently referred to hospitals as the "worst place to be when one is sick." Rogers envisioned a place of healing instead of the sterilized, impersonal hospitals which presently serve as warehouses for the sick. The disconnection that Remen describes is the same that Rogers knew as the disharmony so prevalent in modern hospitals.

Rogerian scholars will find much to identify with in this book. The key ideas of energy, pattern, open systems, and their multiple interconnections to healing, as conceptualized by Remen, are closely aligned to Rogerian science. Remen's simple, straightforward stories, so rich in meaning, are

highly satisfying to those who espouse a view of health and healing far more complete and integrated with the environment than most traditional nursing and medicine practiced today.

An added advantage to this book, especially in busy lives, is that the stories are short, complete in themselves, so that one can read, enjoy, learn, and put the book down. When one is able to read the book later, there is a smooth settling in again.

### References

Remen, R.N. (1996). *Kitchen table wisdom: Stories that heal*. J. P. Putnam: New York.

Pat Christensen, RN; PhD  
Professor, School of Nursing  
University of South Carolina Spartanburg  
Spartanburg, SC 29303  
(864) 258-7894  
email-pbcusc@aol.com



## GUEST BOOK REVIEW

Julie Anderson Schorr, RN;PhD

### ***THE ENIGMA OF ENERGY: WHERE SCIENCE AND RELIGION CONVERGE***

By Vidette Todaro-Franceschi (1999),  
New York: The Crossroad Publishing Co.

In this book, representing a culmination of more than a decade of research concerning the notion of energy, Todaro-Franceschi seeks to move beyond the everyday use of the word and to explicate some universal meaning for a phenomenon that she identifies as the basis for being and becoming. The author makes the point that, throughout time, humans have pondered why we are here, what is life, is there a purpose to the universe or is everything just a chance occurrence. Describing human existence as an enigma, Todaro-Franceschi postulates the phenomenon of energy, in all its conceptualizations across the various sciences, to be the source of this enigma. The author's diverse background in both the sciences and philosophy makes her well-suited to the challenge.

The author reflects upon the word, energy, and notes that deeply imbedded in the idea of energy is an allusion to the transformational ability of things, the notion that things change. She notes that the somewhat Aristotelian notion of actualizing potentials underlies the idea of change, particularly in relation to human beings. Todaro-Franceschi builds upon general concepts of energy and ideas of energy in antiquity, ultimately asserting that energy is a universal phenomenon that provides a sense of oneness across all cultures and seeming boundaries.

In keeping with its Rogerian perspec-

tive, the book reflects a circular, "Slinky" characteristic, moving through explication of the enigma to a brief history of energy, to discussion of the becoming of it all, to the notion of human beings as more than just matter, to the nature of health and healing, to the spiritual essence of the enigma, coming full circle back to the enigma. Todaro-Franceschi's self-described very brief history of energy begins with a discussion of Aristotle's *Energeia* and moves into explication of matter and the forces of nature, the conservation of energy, the notion of energy fields existing everywhere, the tiny quantum world, and the paradoxes of nature. As she seeks to elicit some universal meaning of the phenomenon of energy as a basis for the becoming of it all, the author goes back to the forces of nature and a discussion of the big bang(s), order or disorder, creative evolution (conceptualized as Bergson's *elan vital* and Prigogine's dissipative structures), potential "hidden variables" (implicate and explicate orders, consciousness, morphogenic fields), and the earth as Gaia.

As Todaro-Franceschi seeks to convince the reader that human beings are more than just matter, she moves through a discussion of the mind-body problem into the notion that the mind is in the matter within the context of the world of neurons. She brings into discussion the question of beyond the brain or beyond the body, the idea of para-phenomena within the realm of sentience, and meaningful coincidences. The author then moves through the notion of body, mind, energy, and consciousness into the Science of Unitary Human Beings and the possibility(ies) of a different view. As she discusses the nature of health and healing, Todaro-Franceschi addresses the healing force of nature and begins the chapter with a most relevant quote by Florence Nightingale. The author moves through conceptualizations of the human energy field and energy therapies, spontaneous healing, miracle healing, and participating

knowingly in change into another view of transforming the one.

As she explicates the spiritual essence of the enigma, Todaro-Franceschi goes back to the beginning with her discussion of the tenets of Aquinas and Aristotle, of Genesis, time and energy transformation, of the arguments over Darwin's Theory of Natural Selection, and ultimately asks what, exactly, is nature. Human nature and nature are posited to be all essentially one and related to the notions of death and the eternal soul. As she completes a revolution of the Slinky, Todaro-Franceschi moves full circle back to the enigma, asking again, what is energy. Her answer reflects one of becoming, of having synthesized all that has come before, all that has been discussed since the question was asked at the outset. The answer that emerges addresses how and why things change, the decoding of the pattern, and movement beyond a piecemeal view to the strong conviction that there must be a reason for it all. In the words of Todaro-Franceschi,

What is the enigma? I would answer: it's the fact that every spring the flowers bloom and the trees turn green again; that I wake up to birds singing in the morning; that the sky appears so blue; that the stars are so bright and that they are in a real sense my ancestors; that there is a discernable pattern in every snowflake; that plants (and humans) naturally turn toward the sunlight; that a

song can elicit feelings of immense joy or sorrow; that I can choose my future and actualize my unique potentials - as can every human being. It's the things we've created thus far, like the automobile, the fax machine, the Pentium computer, the telegram, and the planes that fly. Penicillin, aspirin, and interferon....The enigma is everything and everything is energy. It's all one gigantic whole. And to know that it all couldn't possibly *just happen to be here*. The very fact that it is and that we humans can make any sense of it - the physical laws, the philosophical arguments, and all the other knowledge we've managed to accumulate - points to some intention, some purpose, some *reason for it all*" (pp. 146-147).

Todaro-Franceschi's work sheds light on what is meant by the pattern of the whole, explicating abstract notions in ways that may be useful to Rogerian scholars and practitioners alike. As the reader is carried along the Slinky's path where science and religion converge, means through which nurses might help people transform energy patterns and actualize inherent potentials become crystal clear.

Julie Anderson Schorr, Ph.D., R.N.  
Department of Nursing  
Northern Michigan University  
Marquette, Michigan

## CONTROVERSIES COLUMN

### CRITICAL THEORY AND ROGERIAN SCIENCE: INCOMMENSURABLE OR RECONCILABLE

Howard Karl Butcher, RN;PhD;CS

Denise Dredahal (1999, p. 10) recently asserted that "we need to develop theory, conduct research, and enact practice that consider elements of race, class, and gender." Nursing theories that help only to understand the unique differences among individuals and groups are no longer adequate. Inequalities, prejudice, social injustice, and abuses of power can serve to limit the ability of all persons and communities in achieving their potentials for health and well-being. If the goal of the Science of Unitary Human Beings is the actualization of human betterment for all, then the work of nurses practicing Rogerian science must encompass issues of racism, classism, and sexism in the mutual patterning of the human-environment field.

#### Background

There have been few attempts within the Rogerian tradition to address issues raised by critical theorists. Furthermore, there is no literature regarding Rogerian practice or research methods which addresses the need for the emancipation or liberation of human beings from oppressive social systems and the patriarchal, racist, and authoritarian environments that suppress human caring values. In fact, there have been concerns that critical theory is ontologically and epistemologically incongruent with Rogerian science. The very language of critical theory seems reductionistic, causal, prescriptive, and therefore incongruent with the tenets of Rogerian Science.

Cody (1998) illustrated a number of incongruencies between critical theory and

Parse's Theory of Human Becoming, a theory with similar ontological foundations as Rogers' nursing science. He concluded that Parse's theory "provides a more satisfactory guide to practice than does critical theory" (p. 46). Cody argued that critical theorists impose normative judgements and limit freedom by prescribing solutions; however, he did not offer a way of addressing the larger forms of oppression that pervade the socioeconomic environments of persons and the health care system beyond the individual.

#### Purpose

Critical theory discourse has thus far not been connected to nursing theories (Cody, 1998; Dredahal, 1999; Ray, 1992). Instead, nursing scholars have adopted critical theory from a sociological perspective rather than reformulating it to fit within the unique perspective of extant nursing theories. The purpose of this column is to offer a way of conceptualizing and interpreting the issues raised in critical theory through the lens of Rogers' Science of Unitary Human Beings and thereby stimulate dialogue, critique, and possibilities for further ways to make critical theory congruent with Rogerian pattern-based practice.

#### Critical Social Theory

The roots of critical social theory can be traced to the Institute of Social Research founded in Frankfurt, Germany, in 1923. The goal of the Frankfurt School was to revise Marxism and the objectivist interpretation of historical materialism. It was a response to the domination of technological knowledge developed through logical positivist science and its consequent contribution to the oppression of working classes. Critical theorists seek to inspire others to explore instrumental or communicative action for social change through the promotion of justice and freedom. Kinchelore & McLaren (1994) defined a criticalist as one who uses their work as a form of social or cultural criticism and accepts the following set of

assumptions. (a) All thought is fundamentally mediated by power relations that are historically and socially constituted. (b) Facts can never be isolated from values or be separated from ideological inscription. (c) Relationships between concepts and object and between signifier and the signified are never fixed or stable and are often mediated by the social relations of capitalist production and consumption. (d) Language is central to the formation of subjectivity (consciousness and unconscious awareness). (e) Certain groups in any society are privileged over others. (f) While the reasoning of privileging varies, the oppression that characterizes contemporary society is most forcefully reproduced when the oppressed accept their social status as natural or inevitable. (g) Oppression has multiple dimensions, and focusing on any one at the expense of others omits the interconnectedness among them (h) Mainstream research practices are generally and unwittingly involved in the reproduction of systems of class, race, and gender oppression.

While critical theory emerged from a social science perspective, its implications are intertwined with all disciplines. A growing number of nursing scholars, Allen (1985), Campbell & Bunting (1991), Chinn & Wheeler (1985), Stevens (1989), Taylor (1999), and Thompson (1987), have used a critical theory perspective to bring to awareness the systems of oppression, such as racism, sexism, classism, and homophobia, that are embedded in nursing and health care.

### **Relevance of Critical Social Theory to Nursing**

It may appear that the goals of critical theory and nursing are different; however, both nursing and the actualization of health are inseparable from oppressive sociocultural systems. Theoretical discourse in nursing has not linked nursing theories to critical theory as it has linked them to phenomenology, hermeneutics, empiricism, and to theories originating in psychology,

sociology, biological sciences and the humanities. For example, there is little to no literature linking critical theory to conservation principles, self-care, adaptive modes, interpersonal relationships, goal attainment, transcultural care, nursing as caring, human becoming, unitary human beings, or health as expanding consciousness (Cody, 1998). Without linking aspects of critical social theory to nursing theory and thereby becoming aware of our own biases, privilege, and power, we as nurses can become instruments of oppression in maintaining the status quo. Issues of power and oppression impede the actualization of health potentials. These must be addressed and become integral to any model of Rogerian practice.

### **Rogers' Nursing Science**

There can be no doubt that Martha E. Rogers addressed concerns about societal issues that impede the health potentials of unitary human beings. Rogers expressed her concerns clearly in Chapter 16 of her quintessential work *An Introduction to the Theoretical Basis of Nursing*. She discussed nursing's "direct and over-riding responsibility" toward "building a healthy society" (Rogers, 1970, p.122). She wrote:

To maintenance and promotion of health must be added prevention and correction of health problems including those from social inequities, technological advances, and other events on the public scene. Advocates of community health point to poor and inadequate housing, ghetto areas, racial and occupational discrimination, economic and educational deprivation, criminal acts, suicide rates, drug addiction, property destruction, mental retardation, and poor and inadequate delivery of health services as in critical need of public action . . . To deal with such a wide range of seemingly diverse problems as those indicated above requires the

seeing of a pattern, a concept of the wholeness of man [sic] and his environment, and recognition of escalating, dynamic evolution. (Rogers, 1970, pp. 123-124)

Reeder (1993), based on conversations with Rogers, stated that early in her life, Rogers recognized how many "people lacked a zest of life because they lived in conditions that oppressed human potential rather than foster its development" (p. 14). Maximizing creative human potential is the substance of health in Rogerian thought; therefore, "all people have creative potential and deserve the conditions of freedom and autonomy that are necessary for creativity to flourish" (Reeder, 1993, p. 14).

In an ethical analysis of Rogers' life and science, Butcher (1999a) highlighted the concerns for human betterment, freedom, openness, responsibility, and justice-creating that are implicit in Rogers' writing and life. Rogers was a powerful social activist. She cried out against social inequities, inadequate housing, racial discrimination, and poor health care in underserved areas and populations. Since the meaning of "critical" in critical theory is to confront injustice (Kincheloe & McLaren, 1994), most certainly Rogers can also be understood as living the values embedded in critical theory. Her humanism and strong sense of egalitarianism evidenced her value of justice-creating for the purpose of human betterment. Arguing from a postmodern perspective that the values of the theorist are inseparable from the theorist's work, Butcher pointed out Rogerian practice models must include "making the cherished values of Rogerian-ethics intentional in mutual process with the environmental field" (Butcher, 1999a, p. 116). Thus, justice-creating needs to be integral to any unitary pattern-based nursing practice.

Reeder (1993) offered additional insight into the connections between Rogerian nursing science and critical theory. She

illustrated the congruencies and inconsistencies between the Science of Unitary Human Beings and Habermas's contemporary reconstructionist interpretive critical science. Habermas (1981, 1987) created a new agenda for critical theory by specifying a comprehensive approach of rationalization to formulate a theory of *rational communicative action* thereby connecting two previously competing systems: the lifeworld and the system. Rationality refers to the way a person acquires and uses knowledge. This in turn is reflected in human actions. Habermas considered communicative action as the means for freeing life of all forms of unnecessary domination. Life, from this perspective, is based on emancipation and requires both enlightenment and action (Ray, 1992).

Reeder (1993) pointed out that both Habermas and Rogers presented optimistic reconstructive world views that sought emancipation. Rogers fought for the emancipation of nursing from medical dominance, freedom from anti-intellectualism, professionalization of nursing, and for the democratic ideals of human freedom, autonomy and social responsibility. Both Habermas and Rogers provide a constructive, democratic approach to communication in which the individual is viewed as an equal co-participant in a mutual process (Reeder, 1993). Habermas' (1989) idea of reason as communicative action whose goal is "agreement between parties in dialogue that ends in intersubjective mutuality or reciprocal understanding, shared knowledge, mutual trust, and accord with one another" (p. 12) resonates with Rogers' ideas of mutual process, knowing participation, awareness, and harmony. Reeder (1993) pointed out that both Rogers and Habermas viewed reality as having finite (immanent) and infinite (transcendent) features. Finite reality consists of pattern manifestations which are observable events of the world emerging out of the human-

environmental mutual field process in a pandimensional (transcendent) reality. Furthermore, Habermas' notions of locating people in a social and historical context is congruent with Rogers' principle of integrality and illustrates the inseparable nature of human and environmental fields.

### **Reconceptualizing Aspects of Critical Social Theory within Barrett's Theory of Knowing Participation in Change**

While inconsistencies between critical social theory and the Science of Unitary Human Beings exist (Reeder, 1993), the points of coherence provide a path for reformulating aspects of critical theory within a Rogerian nursing science perspective. Issues of gender, race, oppression, classism, sexism, discrimination, and homophobia are pattern manifestations characterizing the human-environmental mutual process. These pattern manifestations may be understood as irreducible human-environmental energetic manifestations characterizing human beings, groups, communities, organizations, or societies. Nurses need to be open to, knowledgeable about, and attend to perceptions and experiences of racism, oppression, classism, sexism, discrimination, and homophobia. These issues may be concerns expressed by individuals, groups and/or communities.

### Inconsistencies between Critical Social Theory and Rogerian Science

Barrett's (1989) mid-range nursing theory of power enhancement offers further depth to reconceptualizing aspects of critical theory within a unitary perspective. Barrett (Barrett, Caroselli, Smith & Smith, 1997) contrasted three different views of power and distinguished them from both traditional critical social theory and feminist empowerment models. For example, critical social theory is particulate, mechanistic, and reductionistic. Critical theory is based on predictability and predetermined outcomes. Change is viewed as causal and deterministic. However, within a Rogerian

perspective, change is acausal and based on free will and knowing participation. Barrett's (1989) theory of power as knowing participation in change has inherent unpredictability and therefore no attachment to outcomes (Barrett, Caroselli, Smith & Smith, 1997). However, differences between the theories may be bridged by reconceptualizing aspects of critical social theory within Barrett's unitary science perspective of power.

### Power from the Perspective of Rogerian Science

Barrett (1989) conceptualized power within a unitary perspective. She defined power as the capacity to participate in the nature of change characterizing the continuous patterning of human-environmental fields as manifest by awareness, choices, freedom to act intentionality, and involvement in creating changes. Within a unitary perspective, Barrett's theory of power as knowing participation in change was derived directly from Rogers' postulates and principles. From Barrett's perspective, power is a natural, continuous theme in the flow of life experiences and describes how human beings participate with the environment to actualize their potential. Barrett (1983) pointed out that most theories of power are causal and define power as the ability to influence, prevent, or cause change with dominance, force, and hierarchy. Power, within a Rogerian perspective, is being aware of what one is choosing to do, feeling free to do it, doing it intentionally, and being actively involved in the change process. A person's ability to participate knowingly in change varies in situations. Thus the intensity, frequency, and form power manifests varies. Power is neither inherently good nor evil; however, the form in which power manifests may be viewed as either constructive or destructive depending on one's value perspective (Barrett, 1989). Barrett (1989) stated that her theory does not value different forms of power but instead recognizes differences in manifestations of power.

## Power in Critical Social Theory and in Barrett's Power Theory

*Power* is also a central concept within critical social theory. Approaches to critical theory endeavor to understand how oppression operates within society and how human perception shapes the social world (Boutain, 1999). From a critical theory perspective, oppression is understood as unequal power relations embedded in the basic structures and functions of society (Stevens, 1989). While Barrett's power theory does not view power as causal abilities to influence, prevent, or cause change with dominance or force, power as knowing participation does not necessarily exclude experiences, perceptions, and expressions of oppression. Power as knowing participation in change focuses on how persons experience, perceive, and express power and issues of awareness, choices, freedom to act intentionally, and involvement in creating changes. Awareness, making choices, the freedom to act, and the ability to be involved in change are all inseparable from experiences of oppression. However, oppression conceptualized within a unitary perspective is not solely a "sociological" phenomenon, but an irreducible energetic manifestation characterizing the human-environmental mutual field process. Oppression may be a characteristic of the human/environmental energy mutual process.

Persons experiencing oppression are a concern for nursing since oppressive environmental patterns may be *experienced as limiting one's*: (a) choices; (b) freedom to act intentionally; (c) involvement in creating changes; and (d) potentialities for the actualization of human betterment and well-being. A key difference between critical theory and Rogerian science is that in critical theory an activist may identify and label a system as oppressive and act prescriptively by empowering individuals to change the system. On the other hand, within a Rogerian science perspective, the client is

the primary source for verifying pattern information (Cowling, 1997). In addition, agreement occurs within the context of mutual process whereby the nurse and the client discuss options, mutually identify goals, and plan patterning strategies. The nurse works within a mutual process, not prescriptively. Participation in planning, as well as the actual change process, emerge through the mutual process of the client, nurse, and environment.

Critical theory and Barrett's power theory are similar in that both view increasing knowledge and awareness as providing opportunities to facilitate knowing participation in change. Within a critical theory perspective "change is facilitated as individuals develop greater insight into the existing state of affairs (the nature and extent of their exploitation) and are stimulated to act on it" (Guba & Lincoln, 1994, p. 115). The aim of critical inquiry is critique and transformation of the social, political, cultural, economic, ethnic, and gender structures that contain and exploit humankind. Confrontation, conflict, advocacy, and action are key concepts of critical social theory. They may lead to a transformation of oppressive structures.

Barrett's power enhancement nursing model also emphasizes increasing awareness as a means to facilitate change. The nurse does not simply provide information to increase awareness, but rather focuses on eliciting client descriptions, incorporating information concerned with the client's current health situation, and helping the person work through the complexities (Barrett, 1989).

Critical social science must be premised upon the development of practice and research approaches which empower those involved in change (Lather, 1991). Lather's assertion is similar to Barrett's notion of facilitating the actualization of potentials through knowing participation in change by being aware, making choices, feeling free to

act on intentions, and orchestrating desired changes. Barrett explained that the objective is not to set goals but rather "to facilitate pattern evolution based on the client's awareness that they have a capacity to participate knowingly in change" (Barrett, 1989, p. 211). Similarly, from a critical perspective, Lather (1991) described empowerment as a "process one undertakes for oneself; it is not something done 'to' or 'for' someone" (p. 4). Therefore, in both Rogerian nursing science and Lather's description of critical theory, involvement in change occurs through increasing awareness and freely acting on one's own choices. On the other hand, critical social theory and Rogerian science differ in the way outcomes unfold. From a critical social theory perspective outcomes may be ascribed to particular causes; however, from a Rogerian perspective, outcomes unfold acausally and unpredictably.

### **Rogerian Praxis**

Rogerian practice models need to include ways to address issues of racism, classism, and sexism in patterning the human-environment field if the goal of human betterment and the actualization of health potentials for *all* are to be achieved. Since the time of Aristotle, the term "praxis" has referred to activities or actions predominate in a person's ethical and political life (Bernstein, 1971/1999). Praxis involves the process of making theory "practical" and integral with the reality of the practice environment. Thus, praxis models link theory with political and ethical actions through practice and research. In a previous work, Butcher (1999a) synthesized Barrett's (1998) Rogerian practice model with Cowling's (1997) model of pattern appreciation as a means to create a more comprehensive Rogerian practice model. Rogerian-praxis focuses on (a) recognizing manifestations of patterning through *pattern manifestation knowing-appreciation*; (b) facilitating the client's ability to participate knowingly

in change; (c) harmonizing person/environment integrity; and (d) promoting healing potentialities and well-being using noninvasive modalities through *voluntary mutual patterning* (Butcher, 1999a, 2000). In addition, the Rogerian praxis model incorporates the use of Barrett's power enhancement nursing model and the Rogerian ethics value of justice-creating (Butcher, 1999b) throughout the pattern manifestation knowing-appreciation and voluntary mutual patterning processes to expand awareness of possibilities for change.

All information about the human-environmental field is relevant within the Rogerian praxis model. Therefore, patterns *experienced as* oppressive are relevant. The patterns include oppressive experiences, perceptions, and expressions of racism, classism, and sexism. Pattern manifestations experienced as oppressive are conceptualized as nonlinear, irreducible, dynamic manifestations of patterning emerging from the human-environmental mutual field process. They may characterize human beings as individuals or as groups, communities, organizations, and/or societies. Using Barrett's (1989) nursing power enhancement model, the nurse addresses the client's concerns by facilitating the client's ability to participate knowingly in change of oppressive environmental field patterns. The nurse, in mutual process with persons, groups, and/or communities, works to mutually design patterning strategies designed to facilitate awareness, choices, freedom to act, and involvement in changing human-environmental field patterns experienced as oppressive. The nurse does not invest in changing the client in a particular direction but rather facilitates and with the client explores options and choices, provides information and resources, so the client can make informed decisions regarding the change process. Thus, clients feel free to choose with awareness how they want to participate in their own change



process (Barrett, 1998). Only by mutually participating in changing human-environmental field patterns experienced as oppressing health potentials will nurses be able to fully facilitate the potentialities for well-being and human betterment for all.

### Summary and Conclusions

Martha Rogers clearly addressed the need for nursing to take responsibility to deal with the societal issues that impede the unfolding of human health potentials. This column explored how issues of power and oppression addressed in critical theory may be reconceptualized within Rogerian nursing science. Reformulations of reductionistic and causal notions of power from critical theory do fit within Barrett's unitary and acausal conception of power as knowing participation in change. The Rogerian praxis model integrates the ethic of justice-creating with the processes of pattern manifestation, knowing appreciation and voluntary mutual patterning. Rogerian praxis offers a means to facilitate the transformation of perceptions and expressions experienced as oppressive that impede the well-being, human betterment, and health potentials of all.

Endnote: This author acknowledges the assistance of Effie S. Hanchett, RN; PhD at Wayne State University for her editorial contributions.

### References

- Allen, D. (1985). Nursing research and social control: Alternative models of science that emphasize understanding and emancipation. *Image: The Journal of Nursing Scholarship*, 17, 59-64.
- Barrett, E. A. M. (1983). *An empirical investigation of Martha E. Rogers principle of helicy: The relationship of human field motion and power*. Unpublished Dissertation, New York University, New York.
- Barrett, E. A. M. (1989). A nursing theory of power for nursing practice: Derivation from Rogers' paradigm. In J. Riehl-Sisca (Ed.), *Conceptual models for nursing practice* (3rd ed., pp. 207-217). Norwalk, CT: Appleton and Lange.
- Barrett, E. A. M. (1998). A Rogerian practice methodology for health patterning. *Nursing Science Quarterly*, 11, 136-138.
- Barrett, E. A. M., Caroselli, C., Smith, A. S., & Smith, D. W. (1997) Power as knowing participation in change: Theoretical, practice, and methodological, issues, insight, and ideas. In M. Madrid (Ed). *Patterns of Rogerian knowing* (pp. 31-46.). NY: NLN.
- Bernstein, R. J. (1971/1999). *Praxis & action: Contemporary philosophies of human activity*. Philadelphia: University of Pennsylvania Press.
- Boutain, D. M. (1999). Critical nursing scholarship: Exploring critical social theory with African American studies. *Advances in Nursing Science*, 21(4), 37-47.
- Butcher, H.K. (1999a). The Artistry of Rogerian Practice. *Visions: The Journal of Rogerian Nursing Science*, 7, 49-54
- Butcher, H.K. (1999b). Rogerian-Ethics: An Ethical Inquiry into Rogers' Life and Science. *Nursing Science Quarterly*, 12, 111-117
- Butcher, H.K. (2000). Nursing Science in the New Millennium: Practice and Research within Rogers' Science of Unitary Human Beings. In M. Parker (Ed). *Nursing Theories and nursing practice*. Philadelphia: F.A. Davis.
- Campbell, J., & Bunting, S. (1991). Voices and paradigms: Perspectives on critical and feminist theory in nursing. *Advances in Nursing Science*, 13(3), 1-15.
- Cody, W. K. (1998). Critical theory and nursing science: Freedom in theory and practice. *Nursing Science Quarterly*, 11, 44-46.
- Cowling, W. R. I. (1997). Pattern appreciation: The unitary science/practice of reaching essence. In M. Madrid (Ed.), *Patterns of Rogerian Knowing* (pp. 129-142). New York: National League for Nursing.
- Drevdahl, D. (1999). Sailing beyond: Nursing theory and the person. *Advances in Nursing Science*, 21(4), 1-13
- Chinn, P.L., & Wheeler, C. (1985). Feminism and nursing. *Nursing Outlook*, 33(2), 74-77.
- Guba, E.G., & Lincoln, Y.S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.
- Habermas, J. (1981). *The theory of communicative action: Reason and the rationalization of society* (T. McCarthy, Trans.) (Vol. 1). Boston: Beacon.
- Habermas, J. (1987). *The theory of communicative action: Lifeworld and system: A critique of functionalist reason*. (T. McCarthy, Trans.) (Vol. 1). Boston: Beacon.
- Habermas, J. (1989). *The theory of communicative action: Reason and the rationalization of society* (T. McCarthy, Trans.) (Vol. II). Boston: Beacon

- Kincheloe, J.L., & McLaren, P.L. (1994). Rethinking critical theory and qualitative research. In N. K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 138-157). Thousand Oaks, CA: Sage.
- Lather, P. (1991). *Getting smart: Feminist research and pedagogy with/in the postmodern*. New York: Routledge.
- Ray, M.A. (1992). Critical theory as a framework to enhance nursing science. *Nursing Science Quarterly*, 5, 98-101.
- Reeder, F. (1993). The science of unitary human beings and interpretive human science. *Nursing Science Quarterly*, 6, 13-24.
- Rogers, M. E. (1970). *An introduction to the theoretical basis of nursing*. Philadelphia: F.A. Davis.
- Rogers, M. E. (1988). Nursing science and art: A prospective. *Nursing Science Quarterly*, 1, 99-102.
- Rogers, M. E. (1992). Nursing and the space age. *Nursing Science Quarterly*, 5, 27-34.
- Stevens, P. (1989). A critical social reconceptualization of environment: Implications for methodology. *Advances in Nursing Science*, 11(4), 56-68.
- Taylor, J. Y. (1999). Colonizing images and diagnostic labels: Oppressive mechanisms for African American woman's health. *Advances in Nursing Science*, 21(3), 32-45.
- Thompson, J.L. (1987). Critical scholarship: The critique of domination in nursing. *Advances in Nursing Science*, 10(1), 27-38.

Howard Karl Butcher, RN;PhD,CS  
 Assistant Professor  
 The University of Iowa  
 College of Nursing  
 324 Nursing Building  
 Iowa City, Iowa 52242-1121  
 Phone (work) 319-335-7039  
 Fax: 319-335-9990  
 Email: howard-butcher@uiowa.edu  
<http://www.nursing.uiowa.edu>

Have a potential submission for this column? Send two copies for consideration to the column editor:

Dr. Effie Hanchett  
 Associate Professor  
 College of Nursing  
 Wayne State University  
 5557 Cass Avenue  
 Detroit, MI 48202

## HUMAN-ENVIRONMENTAL FIELD PATTERNING PRACTICE COLUMN

This new column will feature examples of human-environmental field patterning as practiced by Rogerian nurses. Marcia Anderson's vignette of health patterning with a group field is a wonderful example with which to inaugurate this column.

### GROUP FIELD WORK: LIONS AND TIGERS AND BEARS

Marcia Anderson, RN;PhD

In today's managed care environment, health care payors are demanding shorter lengths of stay in substance abuse treatment. This column presents a nursing strategy for moving the focus of treatment from an individual human energy field integral with an environmental field to that of a group energy field integral with an environmental field. This strategy has the potential to gain clients' attention and increase their awareness of how to knowingly participate in changing their lives. It also helps staff quickly become aware of issues that are ripe for voluntary mutual patterning (Barrett, 1998). Using group field interventions can shorten the time it takes for clients to expand their awareness to include views of formerly invisible options and choices. This column describes the first awakening experience for a nurse contemplating group field work and its potentialities.

#### **Personalized Nursing LIGHT Model: Individual Focus**

The Personalized Nursing LIGHT Model

is a model of the art of nursing based on Martha Rogers' Science of Unitary Human Beings. The model was developed within an energy field perspective. The focus of the model is to facilitate individuals to improve their sense of well being. The model has been evaluated in a 15-year program of research. It has been demonstrated effective in decreasing drug use and stress while improving well being (Andersen, 1980, 1982, 1986; Andersen & Hockman, 1997; Andersen, Hockman, & Smereck, 1996; Andersen & Smereck, 1989, 1992, 1993a; 1993b; Andersen, Smereck, & Braunstein, 1993).

The theoretical basis of the Personalized Nursing LIGHT model is Martha Rogers' Science of Unitary Human Beings (1970, 1981, 1983, 1986, 1988, 1990). Rogers noted that achieving well being is the goal of interest to nursing. Rogers (1970) believed continuous change is inevitable. Nursing's role is to assist clients with their knowing participation in change (Barrett, 1988, 1990, 1998).

For 9 years this model has been the basis of care at The Personalized Nursing LIGHT House, a group of three licensed and accredited substance abuse treatment centers with domiciles in Plymouth, Detroit, and Ann Arbor, Michigan. The LIGHT House programs use the Personalized Nursing LIGHT Practice Model as the basis for the care they provide. Fifty-five recovering men and women are treated in the three programs each day. The waiting lists are long as the care is perceived as excellent by both clients and referral agents.

When treating individuals, we focus on the human energy field of the person integral with his/her environmental field and work to improve the well being of the person. Improvement of well being (providing a baloney sandwich for lunch, a place to stay, a kind word, LIGHT model counseling, connection to a recovering support group, talent assessment, and group substance abuse treatment) has been shown to be

associated with a client's expanded awareness of options and possibilities in life not here-to-for illuminated. (I laughingly tell clients there is a lot of baloney at the LIGHT House.)

### **Need Arises for Group Focused Treatment**

Lately, due to managed care, treatment length of stays have become shorter in substance abuse programs. Because of this, counselors committed to facilitating the improvement of well being of clients at the LIGHT House have been working longer hours and seeing clients multiple times each week to facilitate pattern manifestation knowing and voluntary mutual patterning (Barrett, 1998). Our personalized approach is intensive and effective, but often requires more time than modern payors are willing to authorize of late.

Because our model of care suggests that change is inevitable and omnipresent and voluntary change is the goal, I have chosen to view the new mandated shortened length of stay as an opportunity to expand our awareness of the LIGHT Model's potential. As the illuminator of the LIGHT Model, I have begun to attempt to treat groups of clients using the LIGHT Model. By treating groups, the treatment is more efficient and potentially will take less time.

### **Enlightenment with Groups**

When using the LIGHT Model with a group, I first assess the environmental field of the group using pattern manifestation knowing at the treatment center. I participate in voluntary mutual patterning with the field of the group, maintaining a gentle and respectful touch toward a goal of enhancing choices and well-being of the entities within the field. I facilitate an experience the group can use to illuminate the patterns associated with chaos and group pain. The group is the architect of the archaeological dig for truth. I provide structure for the adventure, but they illuminate their pattern and the patterns of other individuals in the group. Illumination leads to making visible new

ways of behaving to decrease personal and group pain for the individuals in the group.

### **Assessment of Group Pattern**

When I described my process for pattern manifestation knowing of the energy field of a group to my colleague, Dr. Judith Floyd, and her graduate nursing class at Wayne State University, she said that she was reminded of Dr. Pat Benner's (1984) book *From Novice to Expert*. In that book, the intuitional (and by inference, pattern manifestation knowing) skills of expert nurses are thought to be developed over years of practice. Dr. Floyd added, "A person's pattern is always manifest. The real us comes out and is identifiable and is visible as pattern if expert nurses assess or are sensitive and looking for it. Nurses can see pattern for what it is."

The process of assessment of a client community group pattern that I use is to be alert to clues that there is disharmony, discord, or a sense of chaos at one of the LIGHT House programs. (This same assessment skill will work with families, in factories or office settings, or in communities or countries.)

In early April of 1999, I began to notice clues that it was getting "dark" at the LIGHT House in Plymouth, where 36 clients are housed and treated each day. The clues I noticed were the following:

- I felt upset and irritable when I was in the program office.
- Several clients could not get along and were having repeated roommate problems.
- Groups were getting loud, and a client became upset and stormed out of a group counseling session to seek individual counseling.
- When I met with the man who left the group, he said he felt like a new male client in the program was after "his woman." I pointed out that when two stallions fight for leadership or two men duel over a woman, something dies (or in our business relapses

or is discharged for rule violation). As both these men are strong leaders, I recommended they find new ways to work out their differences.

- When I met with two women with roommate problems to help resolve differences and asked them to try to explain their problem at the LIGHT House, they said they felt like there were "Big Bad Wolves" after them. I asked them if they felt like little pigs; they laughed and said yes. One of the women said she felt that she had been "put out" of her former apartment by one of the wolves. I pointed out that the wolf gets the short end of the stick in that tale. I began to realize I might have to focus on protecting the wolves and the stallions at the LIGHT House.

- Later, I noticed I had begun to feel like there was a lion in with my lambs. I noticed a pattern of animal metaphors creeping into my awareness.

- I had a sense of urgency to act before someone got hurt.

As the universe works, I had the opportunity to talk to Dr. Floyd and her WSU nursing students about the patterns I was perceiving two days prior to my planned group process. One of her students operates a halfway house for recovering substance abusers. He identified with my assessment perceptions. He said that once when he had a "lion in with his lambs" he admitted a client who was a "ferret." The ferret protected the lambs, the lion got bored and left, and then so did the ferret, leaving the lambs unharmed. Talking in this way helped me feel understood. Another student told me about a book, *Metaphor Therapy*, by Richard Kopp (1995). The book describes the use of client generated metaphors in counseling situations. He suggests having clients develop a story and then the tale can be retold with a different, more positive ending. A group field process was beginning to form in my head.

### Group Pattern Intervention

The key to group mutual process where the focus is the group energy field is to create an experience where the pattern is "played out." Thus the pattern is illuminated for all of those involved and witnessing "the play." Each becomes aware of the pattern and how to voluntarily participate in change (in their own lives or in the lives of others) to shift the pattern from destructive to constructive. While I have acted in this way on a number of occasions, each time has been different as the group "play" that emerged was unique, spontaneous and improvisational. In some cases, I gave some direction and in other cases, I did not. I was led by my expert sense of which direction was needed in each situation.

On April 8, 1999, I asked staff to identify "the players" of the current drama at the LIGHT House. Staff has a sense of who is manifesting the group pattern or pain. People who have been group leaders or are getting into difficulties with other clients or staff probably are major "players" or dancers of the group pattern.

I gathered all 36 clients in the Plymouth LIGHT House community and 4 staff members into a group room. I had the room set up with a circle of chairs in a middle circle for the players and other chairs around the edges of the room. I gently invited "players" to participate as they came into the room. I invited them to nominate other "players," although I didn't expressly explain what a "player" was at that time.

For this play, I decided to set the "LIGHT House play" in nature. I decided ahead of time to invite players to represent an animal character and "play out" the play at the LIGHT House. After their play was finished, I had decided I would shift the play they created to Noah's Ark, a story about animals getting along together in a time of peril to them all.

I put rocks with sayings like "love," "wonder," "create," "trust," "courage,"

"imagine," and "harmony" in the center of the circle. I also put animal medicine cards in the center of the circle. I let each player choose a small mask to wear. I gave each player and audience participant a small stone to have as a gift for agreeing to participate.

I explained the plan. I invited the audience members to observe and watch for patterns emerging. I explained to the "players" that I would like them to choose an animal they felt an affinity with to play. I asked them to introduce their animal character and tell the audience the name of the animal character they were playing in the play. I told them that insects, fish, reptiles, birds or any animal would be acceptable. After each had told us the animal character they would play and the name of their animal character, I asked who was the leading man of the LIGHT House play. I then asked who was the leading lady. I proceeded to identify supporting actresses and actors and other cast members in this way. Finally, I explained that the setting was the LIGHT House and there was habitat for all the characters, woods, jungle, water, etc. I asked the leading man to give the play a name. He said the play's title was, "When Nature Calls."

I then explained that there is a drama (another word for conflict) going on at the LIGHT House. I asked the leading lady and the leading man to begin and "play it out for us." I asked all other characters to jump in like a jazz combo and play when it became their turn. At first they looked puzzled, but the leading man began to speak and the play began. A pattern at the LIGHT House was illuminated for all to see in the unfolding drama. This is the play that emerged:

**"When Nature Calls!"**

**Cast-14 Players**

Leading Man:

A MOUNTAIN LION named  
Royale

Leading Lady:

A POODLE named Fe Fe  
Supporting Actor A:

A FOX named Robert Scorpio  
Supporting Actor B:

A LAMB named Judah  
Supporting Actress A:

An EAGLE named Guenevere  
Supporting Actress B:

A BABY SEAL named Harvey  
Supporting Actress C:

A GIRAFFE named Scorpio  
Cast Member:

A ROOSTER named Paco  
Cast Member:

A PIRANHA named Mad Ax  
Cast Member:

A TEDDY BEAR named Asia  
Cast Member:

A PANDA BEAR named Dominique  
Cast Member:

A TIGER named Ionic  
Cast Member:

A FAWN named Diana  
Cast Member:

A PITBULL named Buster

**Act One**

**EXT. Lion is sitting on top of a mountain looking over his kingdom**

LION sees many animals in his kingdom. He sees EAGLE sitting on a treetop. He sees POODLE. POODLE is lost in the forest below on the mountain side near a large sea. POODLE is looking for her master. Her master left her out in the wilderness and she is lost and frightened.

**LION** (*looking down*)

POODLE, you have no business in the forest.

**POODLE**

I'm lost. I am scared. It is getting dark.

**TIGER**

She is looking for her master.

**LAMB**

(*with religious implication*)

I was lost, but I see my Master.

**LION**

*(misunderstanding)*

Don't get too close to me, JUDAH the LAMB, I haven't eaten today.

*(to POODLE)*

I can see everything from up here on the mountain top. I can see your house way out there.

**EAGLE**

*(waiting for POODLE to ask her to fly her out of the wilderness)*

I, too, can see the house. I am even higher up on the mountain top than you, MOUNTAIN LION. I can see the path to get to the house. I see the people.

**FOX**

Let's go get the people. EAGLE, tell us how to get there.

**EAGLE**

No, FOX, I won't share any information with you.

**POODLE**

I am so afraid. I don't trust anyone.

**EAGLE**

POODLE, you will be eaten if you don't trust someone.

**ROOSTER**

*(Jumping up on a log in the forest)*

I am Paco the Rooster. I'm lost, too. I belong in a barnyard. I am looking for a nice chicken coop. I had one once, but somebody strapped blades on my feet. With the blades attached to my feet, they turned me into a cock fighter. I don't want to fight anymore. I just want to find my way home and get back to a nice barnyard and a chicken coop with chickens for me to watch over.

**GIRAFFE**

I can see over everything with my long neck.

**POODLE**

Help me. I am lost. Can I get up on your neck? Help me up, please!

**GIRAFFE**

Yes, come over here and climb up on my neck. You will be safe here.

**BABY SEAL**

No. Run.

*(Poodle gets up on the Giraffe's neck)*

**LION**

*(loudly from his lofty spot-to everyone)*

Watch out for PIRANHA! There in the water! Don't get too close to the water!

**PIRANHA**

I haven't eaten today. If you bleed I'll eat you. If I don't smell blood, I can't touch you or hurt you.

**GIRAFFE**

*(Sees a little dog-BUSTER, the PIT BULL)*

Hey, Little Dog, you are a dog like FE FE the poodle. You should help her. She's lost.

**PIT BULL**

*(Exasperated and very annoyed)*

I am not little! Come here, FE FE.

**FOX AND EAGLE**

*(in unison)*

Don't go!

**LION**

Chickens make good meals!

**ROOSTER**

I got blades!

**PIT BULL**

I like chicken bones!

*(to EAGLE-looking at FE FE hanging onto GIRAFFE'S neck)*

EAGLE, fly her home.

**POODLE**

I'm lost. I don't trust any of you wild animals!

**LION**

*(Stretching and roaring)*

I am the king of the mountain!

**PANDA BEAR**

*(Exasperated and annoyed)*

*(under her breath-in a mocking tone)*

Oh No!

**LION**

*(To PANDA BEAR)*

I can pound a PANDA!

**FOX**

LION, high up on your mountain, you

are scared to come down here with all of us!

**POODLE**

I am a house dog. I can't believe my owner left me out here. I am scared.

**PIT BULL**

GIRAFFE, you will have to sleep, some-time and then you'll lower your neck and FE FE will have to come down.

**POODLE**

GIRAFFE, When you sleep, do you lower your neck? Will I have to get down? I'm scared!

**GIRAFFE**

No, I don't sleep. I never let my neck down. I can always see over everything.

**POODLE**

I am so scared. I have to get out of this wild place. I must trust someone!

**PIT BULL**

Who wants to gnaw on blades?

**ROOSTER**

I can fight. I am tough. I just don't want to fight anymore, but I can if I have to.

**PIRANHA**

ROOSTER, you're bleeding!

**ROOSTER**

*(To PIRANHA)*

You know, sometimes I bleed because of these blades on my feet. I still have fight in me, you know.

**LION**

*(To the whole kingdom)*

*(loudly)*

ROAR! It's my feeding time.

**PANDA BEAR**

Be quiet. I'm hibernating.

**LION**

*(Louder. looking at FAWN)*

I'm hungry!

**FAWN**

Don't look at me, look at the BEARS, there is more meat on them.

**POODLE**

Everyone is eating each other. I want to go home!

**LION**

This is survival of the fittest! Eat or be eaten!

**TEDDY BEAR and PANDA BEAR**

We are going to eat some more and go back to sleep. We're sleepy.

**TIGER**

I eat Panda Bears.

**PANDA BEAR and TEDDY BEAR**

We are going back into our caves.

**POODLE**

*(to PIT BULL)*

BUSTER, Help me. We are both dogs.

**PIT BULL**

I am a fighter. We are not the same.

**LION**

It is a dog eat dog world.

**ROOSTER**

I miss the barnyard.

**TEDDY BEAR**

FE FE, follow the lamb.

**FOX**

To the Shepherd!

**EAGLE**

*(to ROOSTER)*

Come on ROOSTER, I'll fly you out of this wilderness.

*(EAGLE flies ROOSTER out of the wilderness and puts him on a road toward home)*

**POODLE**

EAGLE, can you fly me out of here?

**EAGLE**

Of course I can.

**FOX**

Watch out! You can't trust her. She'll drop you. Your master left you out here. Why do you want to find your master anyway? What kind of a master would leave you in the wilderness all alone?

**POODLE**

It was an accident that I got left out here in the wilderness. I just have to get home.

*(To EAGLE)*

EAGLE, How is ROOSTER doing? Can you see him?



## EAGLE

Yes, I can see him. He is finding his way home. He says to tell you this:

## ROOSTER

*(voice over the whole wilderness)*

I am finding my way. It is a very long road home, but I am out of the wilderness and on my way back to my barnyard. I can see a light way down the road.

## POODLE

EAGLE, fly me out of here. I will follow the rooster home. I have to trust someone.

*(The Eagle picks up the poodle who has climbed off the long neck of the Giraffe and flies her out of the wilderness.)*

## LION

Some have to die so some can live. Some are predators and some are born as prey. ROAR! I'm going to eat somebody.

## THE END

### The Shift

As the play ended, I invited the players to play their same characters in my new play. I explained that in this play I am NOAH, they are all animals on the Ark (played by the LIGHT House), and it is raining very hard.

"We will all need to all get along for a little while, at least until our crisis abates and we can find some land," I said. "How will we do this?"

The lion replied, "Are you asking us to become vegetarians?"

"For a little while," I said. "Can we find a way to cooperation and out of the 'eat or be eaten' play? This is a very small ark, and we need every one of us to survive this trip to maintain all the species in the future."

At this point clients who were members of the audience spontaneously reiterated the shift that was needed in order that they might all survive the crisis in their lives. They shared what they had witnessed and where the group needed to go to heal itself, so that all members could live. One woman said, "The poodle followed the right path by trusting and seeking information. Although

we are different, we can look to each other for help. We all have a common goal-to be clean and sober. We can put our differences aside and come together." Animal Power. I then read from the book Medicine Cards by Sams and Carson (1988). The power and contrary power of each animal is listed in the book. First I read the section on the Mountain Lion. "Mountain Lion medicine involves lessons on the use of power in leadership" (p. 105). As I read, each client could see the potential for the power in the characteristic of the animal they had chosen to play. (There are no negative traits in the book, but each animal's section does note what happens when the power is misused or used to the contrary.)

Clients were fascinated as we learned that the power of the bear is introspection, the power of the dog is loyalty, and the power of the fox is observation and adaptability. We created powers for animals in our play which were not in the book. Piranhas can identify the wounded for early treatment with their keen ability to know who is "bleeding." Roosters see the first light of the new day and lead the barnyard in waking up. Those who follow leave the wilderness

Observations. One staff member noticed how the leading lady and leading man played polar opposites: King of the Wilderness and Lost in the Wilderness. Between these electromagnetic poles was the tension at the LIGHT House. "The king will eat the weak and the lost!" The question is, can the negative tension in this "battery" be transformed and be used for positive change for those in the group field and the poles themselves?

Counselors of individual clients could see the pain and drama being carried by individual client players within the "Play" at the LIGHT House through observation of the characters they played and their lines in the play. Potentials for change in individual

sessions became apparent.

Within the emerging managed care medical/health arena, it would seem that group "field" work has potential to facilitate pattern change quickly, in a short amount of treatment time. The process described in this column took 2 hours and affected 36 clients, 14 of them "dramatically."

### Conclusion

Directly after the group, the leading man was seen xeroxing the Mountain Lion section of the animal power book. PIRANHA offered to tell staff who at the LIGHT house was bleeding. He identified four people, one of whom was a staff member. Each of the four were approached and compassionately treated. BABY SEAL later said she felt like something changed. It didn't feel scary and threatening any more at the LIGHT House, she said.

As I went down the stairs to the first floor of the LIGHT House from the second group room, our sign on the door was reflected on the wall of the landing of the stairway as I descended. The sign on the door (Personalized Nursing LIGHT House: Guiding Clients from the Darkness of Addiction) was being illuminated with bright sunshine but only part of it was visible on the reflection of the wall. The reflection read:

Personalized Nursing LIGHT  
Guiding Clients from the Dark.

As I walked out of the LIGHT House to go to my car later that night, exhausted, there in the darkness of the parking lot just outside the LIGHT House door was another "sign," a Band Aid wrapper (after all I am a nurse). The wrapper said "Curad," which I read as "Cured." I decided that the tension between the poles in the group energy field at the LIGHT House had begun to generate LIGHT.

### References

Andersen, M.D. (1980). Personalized nursing: An intervention model for drug-dependent women in an emergency room. *Journal of Addictions & Health: Focus on Women, 1*, 217-226.

- Andersen, M.D. (1982). Personalized nursing: A unique approach to drug-dependent women. *Journal of Emergency Nursing, 8*, 225-231.
- Andersen, M.D. (1986). Personalized nursing: An effective intervention model for use with drug-dependent women in an emergency room. *International Journal of Addictions, 21*, 105-122.
- Andersen, M. D., & Hockman, E.M. (1997). Well-being and high-risk drug use among active drug users. In M. Madrid (Ed.), *Pattern of rogerian knowing* (pp. 152-166). New York: NLN.
- Andersen, M.D., Hockman, E.M., & Smereck, G.A.D. (1996). Effect of a nursing outreach intervention to drug users in Detroit, Michigan. *Journal of Drug Issues, 26*, 619-634.
- Andersen, M.D. & Smereck, G.A.D. (1989). Personalized nursing LIGHT model. *Nursing Science Quarterly, 2*, 72-79.
- Andersen, M.D., & Smereck, G.A.D. (1992). The consciousness rainbow: An explication of Rogerian field pattern manifestations. *Nursing Science Quarterly, 5*, 120-130.
- Andersen, M.D., Smereck, G.A.D., & Braunstein, M.S. (1993). LIGHT model: An effective intervention model to change high-risk AIDS behaviors among hard-to-reach urban drug users. *American Journal of Drug and Alcohol Abuse, 19*, 309-325.
- Andersen, M., & Smereck G.A.D. (1993a). The art of nursing: The personalized nursing practice model. (42 minute VHS Videotape). Plymouth, MI: Personalized Nursing Corporation, P.C.
- Andersen, M., & Smereck, G.A.D. (1993b). *The art of nursing: The personalized nursing practice model workbook*. Plymouth, MI: Personalized Nursing Corporation, P.C.
- Barrett, E.A.M. (1988). Using Rogers' science of unitary human beings in nursing practice, *Nursing Science Quarterly, 1*, 50-51.
- Barrett, E.A.M. (1990). Rogers' science-based nursing practice. In E.A.M. Barrett (Ed.), *Visions of Rogers' science-based nursing* (pp. 31-44). New York: NLN
- Barrett, E.A.M. (1998). A rogerian practice methodology for health patterning. *Nursing Science Quarterly, 11*, 136-138.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park, CA: Addison-Wesley.
- Kopp, R.R. (1995). *Metaphor therapy: Using client generated metaphors in psychotherapy*. New York: Brunner/Mazel Publishers.
- Rogers, M.E. (1970). *An introduction to the theoretical basis of nursing*. Philadelphia: F.A. Davis.
- Rogers, M.E. (1981). Science of unitary man: A paradigm for nursing. In G. Laskeer (Ed.), *Applied systems and cybernetics* (pp. 1719-1722). New York: Pergamon.

- Rogers, M.E. (1983). Charting the future. Paper presented at the First National Rogerian Conference. New York: New York University.
- Rogers, M.E. (1986). Science of unitary human beings. In V. Malinski (Ed.), *Explorations on Martha Rogers' Science of Unitary Human Beings* (pp. 3-8). Norwalk, CT: Appleton-Century-Crofts.
- Rogers, M.E. (1988). Nursing science and art: A prospective. *Nursing Science Quarterly*, 1, 99-102.
- Rogers, M.E. (1990). Nursing: Science of unitary irreducible human beings: Updated 1990. In E.A.M. Barrett (Ed.), *Visions of Rogers' science-based nursing* (pp. 5-11). New York: National League for Nursing.
- Sams, J., & Carson, D. (1988). *Medicine cards: The discovery of power through the ways of animals*. Santa Fe: Bear.

Marcia Anderson, RN;PhD  
Well-Being Institute  
1601 Briarwood Circle  
Suite 200  
Ann Arbor, MI 48108  
Work - (734) 913-4300

## COMMENTARY ON GROUP "FIELD" WORK: LIONS AND TIGERS AND BEARS

Mary Anne Hanley, RN;MA

Throughout the years of her professional life, Martha Rogers described nursing science as creative and innovative. More recently, Rogerian scholars have begun to seriously explore the art and artistry inherent in the Science of Unitary Human Beings. What a pleasure it was to be at the first Rogerian conference of the new millennium at New York University in June, 2000, and to hear Martha Allgood introduce a Theory of the Art of Nursing discovered in the context of the Science of Unitary Human Beings (SUHB); to be moved beyond words as Carol Picard, Shannon Snapp Natale, and Caryl Sickul employed music and dance to demonstrate the power of connection; and

to be transformed with Marcia Andersen as she shared her experience of transforming lions and tigers and bears through an emerging group "field" process.

The piece Andersen has contributed to this volume of *Visions* brings into our reality a sense of the in-the-moment and out-of-the-moment creativity that emerges through the mutual simultaneous process of improvisation. Born of political necessity, her group "field" process answers a variety of needs and demands placed on professional nursing and healthcare in general and the Personalized Nursing LIGHT House in specific. Using the SUHB as the context for understanding and expressing the emergent patterns of the LIGHT House clients and staff, Andersen movingly articulates how the invisible is made visible and how new ways of being are opened to individual members and to the community as a whole.

From the perspective of improvisation, the group field process based on a known convention derived from the SUHB provides both the space/non-space and time/no-time for the community as a whole to elaborate upon what was previously unseen and to create a new landscape for change. Such a pandimensional landscape reflects the community's movement beyond existing parameters of being with and relating to as previously unconsidered potentials for increasingly complex and evolving parameters of connection, responsibility, and commitment are revealed.

New realities emerge with each telling and retelling of this now allegorical story. One reality perceived by Andersen's listeners and readers may reflect the potential for a new health patterning process. Another reality may include the concept of penetrating awareness of non-/or pre-manifested patterns, or "reading the ether" as she described it. Still other realities can only be known to each of us as the story unfolds within the context of our own experience and ethos.

Andersen clearly challenges us to bring our spirit and creativity to the table as we each grapple with the political and human exigencies of being of service to others through creative, empathic, and knowledgeable nursing practice. "Lions and Tigers and Bears" illuminates for me the art in the art of nursing and the SUHB.

Mary Anne Hanley, RN, MA  
University of Texas Medical Branch Galveston  
Work - (409) 772-8304  
Email mahanley@utmb.edu

Have a potential submission for this column? Send two copies for consideration to the column editor:

Dr. Violet Malinski  
Hunter-Bellevue School of Nursing  
Hunter College/CUNY  
425 E. 25th Street, Box 945  
New York, NY 10010

## IMAGINATION COLUMN

### TRACEY'S STORY AND THE POSTMODERN LITERARY POETICS OF EXPERIENCE: DEVELOPING A NEW RESEARCH METHODOLOGY FOR ROGERIAN SCIENCE

Francis C Biley, RN;PhD

The current battery of methods of inquiry that are available in nursing, and in particularly unitary science, are adequate and are able to describe the nonlinear, pandimensional world at least to some degree. However, it could be argued that traditional language forms restrict the degree to which we can represent and relay nonlinear pandimensionality and adequate descriptions of pattern manifestation. There is, perhaps, a need to search for and develop new and alternative, perhaps more congruent, perspectives and methods of inquiry for Rogerian science.

What follows is a brief description of a new potential method of inquiry and an example of it's use. Unlike any other method that has been applied in nursing practice, such as the ethnonursing methodology or existential phenomenology, this new method is not based on any other previous method, nor does it draw inspiration from any other method or research tradition. Rather, it is inspired by the work of arguably one of the greatest American writers of the 20<sup>th</sup> century, William Sewart Burroughs, and the text construction techniques that he employed in writing such modern classics as *Naked Lunch*, *Soft Machine*, and *The Cities of the Red Night*. The method draws primarily on ideas that have been mirrored in theories of general semantics and also has a more informal theoretical foundation in the work of the postmodernists and in the deconstruction genre all typified by, for

example, Korzybski, de Saussure, and Derrida.

William Burroughs conceptualized words as images that act as a virus invading the body (a radical theory developed by Burroughs but mirrored by, for example, Barthes). He considered words to be parasites that are incapable of existing by themselves and that invade the body in order to be reproduced or, in other words, be spoken again.

Burroughs began to consider independently from the postmodernists and in particular the deconstructionalists that the language that we use is inadequate to describe the world around us, and he offered a "radical critique of the habitual structures of Western language" (Ingram, 1996, p. 95). He spoke of language as word images that invade our bodies, imposing false realities. In order to avoid this, Burroughs began to "build a language in which certain falsifications inherent in all Western languages will be made incapable of formulation" (Burroughs, 1979, p.iii). In order to achieve this, Burroughs abandoned ideas related to, for example, linearity, the use of the definitive article as a perpetuation of dogmatism and authoritarianism by replacing 'the' with 'a,' and by eliminating polarising binary oppositions such as 'either/or' replacing them with 'and'. This is in a similar fashion to de Saussure, who regarded the linguistic sign as "not a link between a thing and a name, [as is our usual interpretation] but [a link] between a concept and a sound pattern" (de Saussure, 1972, p. 98). Furthermore, Burroughs introduced elements of randomness and nonlinearity into the process of textual production by using cut-up and paste-in or fold-in techniques. This process involved Burroughs cutting up the texts that he produced and also introducing further random elements from, for example, newspapers or classic novels. He would then join the cut-ups and fold-ins in order to create the new text. In this way, Burroughs

hoped to "make explicit a psychosensory process that is going on all the time anyway" (Burroughs, 1978, p.4). He added that writing is normally "confined in the sequential representational straightjacket...a form...far removed from the actual facts of human perception and consciousness" (Burroughs, 1985, p. 65). Life is a cut-up he said, full of random interjections. His writing aimed to "exorcise habitual conditioned responses, to project one's very nervous system onto some external plane (the writing machine)" (Lydenberg, 1987, p.54). By using such a process, Burroughs achieved a disturbing and anxiety provoking level of unease and vague feelings of familiarity; an awareness of different human-environment field patterns, or at least an alteration in those patterns; a feeling of space/time travel; and an escape from the formal and accepted structure of language and the restrictions of subjective conditioning, out of any fixed self-image perception. New connections and infinite associations are created. The word is an object detached from the author, the context, and its signifying function. As Burroughs stated, "one's range of vision consequently expands" (1978, p.4).

In order to achieve this, standard text is taken and subjected to an automatic computerized cut-up program, which, in the tradition of Burroughs, requires no direct text manipulation. The program "deconstructs" and edits the text in a predetermined way and produces new structures, forms, and pattern manifestations. What is achieved is probably similar to what Burroughs (1978) aimed for in his own work, which was

a mutation in consciousness, [which] will occur spontaneously once certain pressures now in operation are removed. I feel that the principal instrument of monopoly and control that prevents the expansion of consciousness is the word lines controlling thought, feeling and apparent

sensory impressions of the human host...in other words, man [sic] must get away from verbal forms to attain the consciousness which is there to be perceived (p. 8).

In the following example, the cut-up program has been used to manipulate Tracey's story as it was first related by Maxwell (1990) and later used by Boykin and Schoenhofer in 1991. The original text is presented first, followed by the cut-up version produced by the computer program. The second version has been slightly edited in order to ease the process of reading; beyond this no other changes have been made. Although the original text is moving and revealing in it's own way, the cut-up reveals new patterns, manifestations, relationships and experiences, new appreciations of the manifestation. No attempt is or should be made to analyze the new version as it should not really be viewed "in terms of process and product. The experience of participating with the art creates moments anew, and the work lives for each person in a unique and special way" (Boykin & Schoenhofer, 1994, p.158).

#### Tracey's story.

*I listened to the change of shift report and remember the strange feeling in the pit of my stomach when the evening nurse reviewed Tracey's lab tests. Tall, strawberry blond and freckle faced, Tracey was struggling with the everyday problems of adolescence and fighting a losing battle against leukaemia. Tracey rarely had visitors. As I talked to Tracey that night I felt resentment from her towards her mother and experienced a sense of urgency that her mother be with her. With Tracey's permission I called her mother and told her that Tracey needed her that night. I learned that Tracey's mother was a single mother with two other small children and that she lived several hours from the hospital. When she arrived, distance and silence prevailed. With encouragement, the mother sat close to*

*Tracey and I sat on the other side stroking Tracey's arm. I left the room to make my rounds and upon return found Tracey's mother still sitting on the edge of the bed fighting to stay awake. I gently asked Tracey if we could lie on the bed with her. She nodded. The three of us lay there and then I left the room. Later, when I returned I found Tracey wrapped in her mother's arms. Her mother's eyes met mine as she whispered she's gone. And then she said please don't take her yet. I left the room and closed the door quietly behind me. It was just after 6 o'clock when I slipped back into the room just as the early morning light was coming through the window. I reached out and touched Tracey's mother's arm. She raised her tear-streaked face to look at me. It's time I said and waited. When she was ready I helped her off the bed and held her in my arms for a few moments. We cried together. Thank you nurse she said as she looked into my eyes and pressed my hand between hers. Then she turned and walked away. (Maxwell, 1990, p.3)*

#### **The Cut-up Version.**

And I listened.

I, mother, nurse.

I sat on the edge of the bed fighting to stay awake and held her in my arms for a few moments.

We cried together. Thank you nurse she said, please don't take her yet

I reached out and touched Tracey's mothers arm. She raised her tear-streaked face to look at me. It's time I said and waited.

Distance and silence prevailed.

We cried together. Thank you nurse she whispered, she's gone.

And then she said please don't take her yet,

I left the room.

Later, when I returned I found Tracey wrapped in her mother's arms.

Her eyes met mine. As she pressed my hand between hers.

I left the room and closed the door quietly behind me.

I reached out and touched Tracey's mothers arm.

She raised her tear-streaked face to look at me.

It's time I said and waited.

When she was ready I helped her off the bed and held her in my arms for a few moments.

We cried together.

Thank you nurse she said as she looked into my eyes.

Tall, strawberry blond and freckle faced,

Tracey rarely had visitors.

I left the room.

With encouragement, the mother sat close to Tracey that night.

I felt resentment.

She nodded.

The three of us lay there and then I left the room just as the early morning light was coming through the window.

I reached out and touched Tracey's mother's arm.

She raised her tear-streaked face to look at me. It's time I said and waited.

When she was ready I helped her off the bed.

We cried together.

Then she turned and silence prevailed.

With encouragement, the mother sat close to Tracey.

Tracey needed her that night.

It's time I said and waited.

Tall, strawberry blond and freckle faced,

Tracey was struggling with the every-day problems of adolescence and fighting a losing battle against leukemia.

Tracey rarely had visitors.

She raised her tear-streaked face to look at me.

It's time I said and waited.

I left the room.

Later, when I returned I found Tracey wrapped in her mother's arms.

Her mother's eyes met mine as she whispered she's gone.

She said please don't take her yet.

I left the room and closed the door quietly behind me.

It was just after 6 o'clock when I returned,

I found Tracey wrapped in her mother's arms.

Her eyes met mine as she whispered she's gone. She whispered she's gone.

And then she said please don't take her yet.

I left the room.

It was just after 6 o'clock when I returned.

I found Tracey wrapped in her mother's arms.

Her mother's eyes met mine as she whispered she's gone.

And then she whispered she's gone.

Tracey's mother was a single mother.

When she was ready I helped her off the bed.

I called her mother and experienced a sense of urgency that her mother...

I experienced a sense of urgency that her mother...

that her mother be with her.

She nodded.

The three of us lay there and then I left the room just as the early morning light was coming through the window.

I reached out and touched Tracey's mother's arm.

She raised her tear-streaked face to look at me.

Its time I said and waited.

When she was ready I helped her off the bed.

She nodded.



The three of us lay there and then I left the room just as the early morning light was coming through the window.

I reached out and touched Tracey's mother's arm.

She raised her tear-streaked face to look at me.

It's time I said and waited.

When she was ready I helped her off the bed and held her in my arms for a few moments.

We cried together.

Thank you nurse she said please don't take her yet

It's time I said and waited.

Then she turned ...

Tracey's light waited.

Strawberry Tracey.

I,

She,

Nurse,

Tracey.

Hospital.

Tracey's leukemia.

Tracey needed her that...

Tracey needed her that night.

It's time I said and waited.

We cried together.

Thank you nurse she said.

Her mother's eyes met mine.

We cried together.

And she whispered she's gone.

And then she whispered she's gone.

She turned.

Tall, strawberry blond and freckle faced,

Her eyes met mine as she whispered she's gone. She whispered she's gone.

When she was ready I helped her off the bed.

I reached out and touched Tracey's mother's arm.

She raised her tear-streaked face to look at me

Tall, strawberry blond and freckle faced.

Her eyes met mine and then she whispered she's gone.

She turned...

This paper is based on a presentation to the Sigma Theta Tau conference "Varying Perspectives on Post-Modernism," 27 September, 1999; City University, London.

### References

- Boykin, A; Parker, M.E. & Schoenhofer, S.O. (1994). Aesthetic knowing grounded in an explicit conception of nursing. *Nursing Science Quarterly* 7, 158-61.
- Boykin, A., & Schoenhofer, S.O. (1991). Story as link between nursing practice, ontology, epistemology. *Image: The Journal of Nursing Scholarship*, 23, 245-8.
- Burroughs, W.S. (1978). *The third mind*. New York: Viking.
- Burroughs, W.S. (1979). Electronic revolution. In: *Ah*

*Pook is here and other texts*. London: John Calder.  
Burroughs, W.S. (1985). *The fall of art. In the adding machine: Collected essays*. London: John Calder.  
de Saussure, F. (1979). *Course in general semantics*. London: Duckworth  
Ingram, D. (1996). William Burroughs and language. In A.R.Lee(Ed.), *The beat generation writers*. London: Pluto Press.  
Lydenberg, R. (1987). Word cultures: Radical theory and practice. in *William S. Burroughs' Fiction*. Urbana: University of Illinois Press.  
Maxwell, G. (1990) Connections. *Nightingale Songs, 1 (1)*. *Nightingale Songs* can be found on line on the Florida Atlantic University, College of Nursing Home Page. [www.Fau.Edu/Divdept/Nursing/NGSongs/Nighting.HTM](http://www.Fau.Edu/Divdept/Nursing/NGSongs/Nighting.HTM)

Have a potential submission for this column? Send two copies for consideration to the column editor:

Howard Karl Butcher, RN;PhD,CS  
Assistant Professor  
The University of Iowa  
College of Nursing  
324 Nursing Building  
Iowa City, Iowa 52242-1121  
Phone (work) 319-335-7039  
Fax: 319-335-9990  
Email: [howard-butcher@uiowa.edu](mailto:howard-butcher@uiowa.edu)  
<http://www.nursing.uiowa.edu>

Francis C Biley RN PhD  
Senior Lecturer in Nursing, University of Wales College of Medicine.  
Address:  
School of Nursing Studies,  
University of Wales College of Medicine,  
Heath Park,  
Cardiff,  
Wales, UK.  
[biley@cardiff.ac.uk](mailto:biley@cardiff.ac.uk)

THE MARTHA E. ROGERS COLLECTION  
BOSTON UNIVERSITY  
MUGAR LIBRARY  
DEPARTMENT OF SPECIAL COLLECTIONS  
HISTORY OF NURSING ARCHIVES  
BOSTON, MASSACHUSETTS

The Martha E. Rogers Collection comprises 10 boxes of documents and 2 packages of other materials. The documents are stored in 6 manuscript boxes and 4 shipping boxes, all of which are made of acid-free materials. All documents are encased in acid-free folders. All photographs are encased in mylar envelopes. The packages contain diverse materials that do not fit in manuscript or shipping boxes, such as award plaques, uniforms, photographs, correspondence, and Martha's birth certificate.

An inventory of all materials in the collection has been compiled.

The complete Martha E. Rogers Collection is stored in a vault that houses the entire History of Nursing Archives.

The Mugar Library Department of Special Collections is open Mondays through Fridays, from 9 a.m. to 5 p.m.

Scholars interested in viewing documents in the Martha E. Rogers collection should contact the Mugar Library Department of Special Collections at (617) 353-3696 (e-mail to: [speccol@bu.edu](mailto:speccol@bu.edu)) at least 2 days in advance.

Each scholar is required to complete an application and select what is needed from the Collection inventory. A staff member will retrieve the requested document(s). The scholar must wear linen-free white gloves, which are supplied by the Department of Special Collections, when handling documents and photographs. A staff member does photocopying of documents, for \$0.25 per copy. All activity within the Department of Special Collections is monitored via closed circuit television.

Mugar Library holdings include Martha's books, *Educational Revolution in Nursing* (1961), *Reveille in Nursing* (1964), and *An Introduction to the Theoretical Basis of Nursing* (1970).

Information compiled by - Jacqueline Fawcett, RN;PhD;FAAN

## Rogerians in the News

A number of people received awards at the Rogerian Conference at New York University in June. **W. Richard Cowling III**, President and President Elect of The Society of Rogerian Scholars, and Editor of the Newsletter, *Rogerian Nursing Science News*, received the Golden Slinky Award. **Sheila Cheema**, Executive Editor of *Visions: The Journal of Rogerian Nursing Science*, also received the Golden Slinky Award.

The Golden Slinky Award was instituted to honor Martha E. Rogers, the creator of the Science of Unitary Human Beings, for her contributions to nursing and society, her concerns for human betterment, and her advocacy for social justice of all people. The award recognizes persons whose life and work continue Rogers' vision of nursing and humankind. The criteria for the award are:

Scholarly contributions to unitary nursing science.

Creative endeavors that enrich unitary nursing science and human betterment.

Advocacy for social justice for all people.

Contributions to the development, planning of, and participation in the Rogerian conferences.

The first awards were given to **Mary Madrid**, and **Violet Malinski** in 1996. In 1998 the awards were given to **Francis Biley** and **Rosemarie Parse**.

**Joan Hoexter** received a special award to recognize all of the work she has done both for the Rogerian conferences and for Rogerian nursing science.

The Martha E. Rogers Scholars Fund awarded two scholarships for the year 2000. The awardees were **Dorothy M. Larkin**, a doctoral student at New York University, and **Alison M. Rushing**, a doctoral student at Virginia Commonwealth University. The Martha E. Rogers Scholars Fund also held a fundraising raffle at the Rogerian conference. The winner of the lovely, purple and white handmade quilt was **Mary Anne Hanley**.

One of the highlights of the Rogerian conference was the announcement that **Jacqueline Fawcett** has established the Jacqueline Fawcett Award at the Division of Nursing, New York University. She presented a check for \$25,000 at the Alumni dinner to initiate the award and has designated the Jacqueline Fawcett Award fund to receive the royalties from her books after her death. As we expect her to live a long and productive life and to write many more books, that should amount to a considerable sum. Many future students will benefit from her generosity.

The income from the fund is to be assigned to the Martha E. Rogers Center for the Study of Nursing Science, to be used for support of doctoral dissertation research based on an explicit conceptual model of nursing, and for the support of Martha E. Rogers Center for the Study of Nursing Science Visiting Scholars, if the Visiting Scholars' research is based on an explicit conceptual model of nursing. Any one award is not to exceed \$2,500, and the number of awards shall be dependent upon available funds

## CALL FOR PRESENTER PROPOSALS

**"2001: A Nursing Odyssey"**  
with a special tribute to Martha E. Rogers

June 21 - 24, 2001

Huntsville Marriott adjacent to the US Space and Rocket Center  
Huntsville, Alabama, USA

Co-sponsored by the American Holistic Nurses Association,  
the Society of Rogerian Scholars, and the  
Space Nursing Society

The conference theme reflects exploring concepts of nursing and space such as:

- Space travel and its effects on the human body and spirit
- The relationships of "space nursing" and "holistic nursing"
- The use of theory (especially Rogerian theory) in reflecting on nursing practice and evolution or change in nursing's work
- The meaning of "inner space" and "outer space"

There is a topic theme for each day of the conference (except for Thursday, June 21, which is reserved for pre-conference workshops):

Friday, June 22: "Where We Are and What We Know"  
Keynote Speaker: Dr. Phillip R. Harris

Saturday, June 23: "Keeping Holism at the Forefront"  
Keynote Speaker: Dr. W. Richard Cowling, III

Sunday, June 24: "Where Are We Going?"  
Keynote Speaker: Dr. Marilyn A. Ray

**Note:** Because there is a particular emphasis on Rogerian theory and Rogers' work with and interest in space travel, any presentation in keeping with Rogerian science will be considered.

To request a presenter packet with instructions for proposals, contact the American Holistic Nurses Association at 1-800-278-2462, extension 16, or send an email to [AHNA-Conference@flaglink.com](mailto:AHNA-Conference@flaglink.com) or write to Doris Rager, AHNA Conference Administrator, American Holistic Nurses Association, P.O. Box 2130, Flagstaff, Arizona, USA.

Contact hours will be awarded for this conference by AHNA, an approved provider via the American Nurses Association Credentialing Center.

Presenter proposals must be postmarked by October 15, 2000.

SOCIETY OF ROGERIAN SCHOLARS  
MARTHA E. ROGERS SCHOLARS FUND, INC.

The Society of Rogerian Scholars Martha E. Rogers Scholars Fund was established in 1994. The Fund is exclusively charitable and educational with the following purposes:

Educate the public about the nursing community's roles in health care.

Promote the use of the Rogerian Science of Unitary Human Beings for the well being of people.

Provide scholarships and fellowships to persons who are studying and using the Rogerian Science of Unitary Human Beings.

Cooperate with local, national or international not-for-profit organizations to inform the public about Rogerian nursing science.

Conduct activities that are necessary, useful or desirable in accomplishing the purposes of the Fund.

PARTICIPATING

Martha E. Rogers said, "Dream Big!" You can make her dream a reality through your generous contribution or gift. The purposes of the fund can be achieved through your participating in her dreams and visions.

Yes, I want to participate in the dreams and visions of Martha E. Rogers.

My contribution of \$250.00\_\_\_ \$100.00\_\_\_ \$50.00  
\$25.00\_\_\_ Other\_\_\_ is enclosed.

Please include your name and address and make check payable to:

Martha E. Rogers Scholars Fund  
Society of Rogerian Scholars  
P.O. Box 1195  
Canal Street Station  
New York, NY 10013-0867

Contributions are tax deductible  
Tax ID number for 501c(3) 13-3765918

*Society of Rogerian Scholars*  
*Canal Street Station*  
*PO Box 1195*  
*New York, NY 10013-0867*  
**MEMBERSHIP APPLICATION FORM**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone (Home) \_\_\_\_\_ (Work) \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Affiliation: \_\_\_\_\_

- |                                               |       |                          |
|-----------------------------------------------|-------|--------------------------|
| Patron                                        | \$250 | <input type="checkbox"/> |
| Supporting Member                             | \$150 | <input type="checkbox"/> |
| Institutional Member                          | \$ 85 | <input type="checkbox"/> |
| Regular Member                                | \$ 55 | <input type="checkbox"/> |
| Student (with copy of student ID) and Retiree | \$ 35 | <input type="checkbox"/> |

**Make checks (U.S. funds only) payable to: Society of Rogerian Scholars**

**Membership year runs from July 1 through June 30. For New Members Only who pay in April, May, or June, Dues are credited towards the following year.**

Library subscriptions are available for *Visions: The Journal of Rogerian Nursing Science* at \$20.00 per year. Reprints of Articles in *Visions* are available for \$2.50 per article. Back issues are \$15.00 per copy.

**Society of Rogerian Scholars  
Canal Street Station  
PO Box 1195  
New York, NY 10013-0867**

**PRESORTED  
STANDARD  
U.S. POSTAGE PAID  
WHITE PLAINS, NY  
PERMIT NO. 513**