

Society of Rogerian Scholars

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50th Anniversary of Martha E. Rogers’ *An Introduction to the Theoretical Basis of Nursing* (1970-2020).

Contributions of Martha E. Rogers Over the Past 50 Years: A Conversation at the Society of Rogerian Scholars Virtual Conference

Interview Between Dr. Violet Malinski & Dr. Anne Marie Leveille, SRS Conference

AML: I am so honored to be part of this conversation. What a time to celebrate the past and vision the future. It has been 50 years since Martha wrote *An Introduction to the Theoretical Basis of Nursing*. Dr. Malinski, First, where were you in your career when the 1970 book was published, and what did you see as its impact on nursing?

VM: I was actually at NYU in the graduate program in the old child psychiatric nursing major started by Dr. Claire Fagin, 1969 - 1971. *Educational Revolution in Nursing* and *Reveille in Nursing*, Martha’s earlier books published in 1961 and 1964, were required reading but *An Introduction to the Theoretical Basis of Nursing* (1970) was not. There was discussion, heated discussion to say the least, about a new course Martha wanted to develop and teach in the graduate program, the original Science of Man, with the 1970 book as the required textbook. This meant a curriculum change, so there were a number of faculty meetings with student representatives to discuss this. I was one representative, a young, naive graduate student who could not believe faculty would act that way or talk to one another the way they did, major opposition. The students were pretty much in turmoil, too, basically following the lead of our faculty. Fagin had already left, as I recall, and more of our psych faculty soon followed. The

upshot was that the 1972 graduating students would be the first to take the new required course, Science of Man. Those of us in the 1971 graduating group breathed a sigh of relief.

I had sense enough to know that wherever I ended up after graduation, turned out to be Washington, D. C., nurses were going to ask me about Martha Rogers once they learned I had graduated from NYU, so I bought the 1970 book at the NYU Bookstore and read it. I can't say that I experienced any ah-has or transformations in the way I viewed nursing, it was more of a HHHHMMMMMMMM....

I couldn't really explain any of Martha's ideas when folks asked me, but I was struck by one thing. When they asked, folks often did not refer to her by name, rather it was "that woman" or "that crazy lady" or "that crazy space nurse" at NYU, and of course everyone knew the reference was to Martha Rogers. The crazy reference had been around before publication of the 1970 book, based on the earlier books where she stated things like a 5-year baccalaureate program was required for professional nurses, and under her leadership NYU had one for some period of time. Now add insult to injury, and we have energy fields and outer space in a nursing textbook. I thought nurse theorists deserved more respect than that, having "grown up" in nursing at Rutgers College of Nursing where Dr. Hildegard Peplau headed the graduate psych program. Her interpersonal theory guided my program, and we read her book in our sophomore year when we started clinicals. D. C. was Dorothea Orem's home territory, and the medical center where I worked used the self-care model as the framework for nursing.

Rogers' ideas were definitely hard to grasp, especially compared to Peplau and Orem. She initiated in nursing what Thomas Kuhn (1970) called a scientific revolution, and the turmoil surrounding her work followed what he described as happening during those times. Although many people couldn't make head nor tail out of what she was talking about, it was that different

from the traditional ways of thinking about nursing, others were relieved, excited, mystified but intrigued, to think about nursing in a radically different way. I would say that, outside of Florence Nightingale, no one else had ever introduced such a transformative vision of nursing. And that very novelty was going to ruffle a lot of feathers. Also remember the words she chose to put in the titles of her early 1960s books, *revolution and reveille*, a call to action.

In the early days I can remember times when Martha was speaking at some conference, and it was like a wave of hostility flowed toward her from the audience. She used to say that whenever she spoke somewhere, the first thing she did was look out a window to see how far she was from the ground in case she had to jump. Humorous, yes, but a grain of truth as well. Later, of course, people realized her importance to nursing and the significance of her work and would give her standing ovations. At one such conference I heard a young woman say that she didn't really understand much of what Martha had said, but it was wonderful just to be in the presence of such an icon of nursing.

AML: An icon of nursing, indeed she was, and that brings us to our next question:

What were the major ideas about nursing science introduced by Rogers, and was she one of the first to use the term, nursing science?

VM: Rogers was definitely one of the first to use the term nursing science, which for her meant disciplinary knowledge. She was the first to identify nursing as a basic science. She initiated and edited a journal called *Nursing Science* from 1963 - 1965, published by F. A. Davis. It featured articles and editorials by Martha as well as folks like Sr. Callista Roy, Mildred Montag, and Hildegard Peplau. It included content on the emerging science of nursing, theory development, research, the process and content of professional education across all levels, and nursing practice. Radical and far ahead of its time, the journal could not sustain a long life. Her

1970 book had the term “Nursing Science 1” appearing on both the spine and the lower right hand corner of the cover, suggesting more books to follow, which unfortunately didn’t materialize.

In her 1970 book Rogers expanded ideas introduced in more embryonic form in her 1961 and 1964 books. She identified five basic assumptions of Rogerian science and what were then four principles of homeodynamics. The assumptions described what she was then calling the life process as characterized by wholeness, openness, unidirectionality, pattern and organization, sentience, and thought. Although she later dropped the five assumptions as such and modified the principles, the book is historically significant not only for this early description of nursing science but for the carefully identified links that she drew to similar ideas emerging in other sciences at the time. With her doctorate in science from Johns Hopkins University she was conversant with a variety of interdisciplinary sources that she used to support the foundation for her nursing science. The ideas were hers, and she showed how they were similar to, expanded on, or offered yet new insights into emerging views in other sciences. For example, she discussed both the contributions and limitations of systems theory and Einstein’s view of space-time. As she wrote in the 1970 book, “The science of nursing is an emergent—a new product” (p. 83). In July, 1969, Armstrong, Aldrin, and Collins traveled to the moon, and Martha was already thinking about space travel and space research, writing in the 1970 book that “Man is no longer bound to planet Earth” (p. 129) and “Basic assumptions underlying contemporary health services are disintegrating in the face of new knowledge and new interpretations of man and his environment” (p. 129). Nothing like this was prevalent in the nursing literature of the time.

Some novel, key ideas taken from *An Introduction to the Theoretical Basis of Nursing*, couched in the language of that time, please remember that. Many of the words/ideas that you

will hear were dropped along the way as she refined her nursing science. For those of you around my age, and I'm 73, try to remember some other nursing author who was talking about similar things at the time.

Nursing science seeks to make intelligible knowledge about man and his world that has special significance for nursing. The phenomenon central to nursing's conceptual system is the life process in man. A conceptual model of the life process in man...provides the base from which relevant theories may be derived and tested. (p. 83)

Science is concerned with meanings rather than with facts. A conceptual frame of reference is an indispensable prerequisite to the ordering of knowledges and to the formulation of meaningful propositions. An organized system of concepts further provides a repository for experiential observations which can enrich the conceptual system in the continuing search for systematic relationships among a range of phenomena. (pp. 83-84)

"The emergence of a science of nursing demands a clear, unequivocal conceptual frame of reference (p. 84)."

Nursing is concerned with people—all people—well and sick, rich and poor, young and old. The arena of nursing's services extends into all areas where there are people; at home, at school, at work, at play; in hospital, nursing home, and clinic; on this planet, and now moving into outer space. (p. 86)

The education of professional practitioners in nursing requires the transmission of a body of scientific knowledge specific to nursing...The imaginative and creative use of knowledge for the betterment of man finds expression in the art of nursing. ..The purpose

of professional education is to provide the knowledge and tools whereby an individual may become an artist in his field. It is not to prepare the skilled practitioner. (p. 88)

(Remember, we are talking 1970 here and words that were probably written at the end of the 1960s).

Now, her theoretical ideas. She placed the following quote from Kierkegaard before Unit III, Nursing's Conceptual System: "To venture causes anxiety. But not to venture is to lose oneself (p. 79)."

The first paragraph of her introduction to this unit makes clear that Nursing exists to serve people. The extent to which nurses will be successful in contributing to the health and welfare of human beings is dependent on the nature and validity of the hard core of theoretical knowledge that underwrites nursing practice. (p. 81)

She again made clear that this knowledge does not come from other disciplines but is "an emergent—a new product" (p. 81), the science of nursing, and so called for basic research in nursing. As if this wasn't revolutionary enough, she went on to say that the life process is a unity, inseparable from the environment, so labels of normal and pathological are invalid, as however we define health and illness, both are expressions of this life process. She wrote, "Health and illness, ease and disease are dichotomous notions, arbitrarily defined, culturally infused, and value-laden" (p. 85). Not what I learned in baccalaureate education during the 1960s.

"Envision the human field embedded in the curvature of space-time...ever shaping and being shaped by the environment" (p. 91).

“The human field occupies space, extending in all directions. The field projects into the future as well as into the past. The creativity of life emerges out of the man-environment interaction along life’s continuum” (p. 91).

Now here comes the famous slinky as a metaphor for the rhythmical nature of the life process as it evolves along the curvature of space-time, evolving, twisting, turning, energy “being exchanged” with the environment, sentience and thought arising out of this interaction. They said, really, a toy?

Rogers speculated that the most difficult thing to understand was the idea of wholeness, as nursing and so many other fields were imbued with the language of parts: cells, organs, systems; biological, physical, and psychological dimensions. For her, wholeness was “central and indispensable to nursing’s conceptual model” (p. 93). What other nursing theorist of that time was discussing anything like this?

The four principles of homeodynamics guided the theoretical basis of nursing: reciprocity, synchrony, helicy, and resonancy, and she expressed them symbolically as equations which she then translated into definitions, except for resonancy which had the simplest definition. The equations alone drove many people crazy—this isn’t nursing!

Her chapter on formulating testable hypotheses also did not resemble nursing research of the time. She suggested things like exploring and mapping fluctuating boundaries of the human field, how motion might be related to longevity and rhythmic phenomena, how sound waves are related to pattern and transformation of the human field, and how contemporary events are expressive of the sequential and creative nature of life in a world of wars, parental child abuse, adolescent gangs, and hierarchical systems, with increasingly militant demands for human rights. (Sounds like 2020, doesn’t it?) How are probabilistic outcomes of hostility, aggression, fear, etc.,

transformed into ones of respect for human dignity, acceptance of differences, love, freedom, etc. The last two sentences could have been written today. Again, not what her contemporaries were discussing or writing about.

When she talked about translation into practice, Rogers emphasized the importance of nursing knowledge as foundational, as nursing is both science and art. The science guides the art of nursing, not the tools of practice like technical and manual skills. “The wholeness of man and his integrality with nature are basic premises underwriting nursing practice” (p. 122), and “Human relationships as instruments of therapy are increasingly emphasized” (p. 122). (Note early use of the word “integrality” to which she would return later as the name for one of her principles.) She identified the importance of recognizing individual differences and helping people to live harmoniously with the environment, not in conflict with it. She emphasized the importance of community health services to correct and prevent health problems from social inequities, racial and occupational discrimination, drug addiction, and so many of the same problems we face today, 50 years later.

“Knowledgeable nursing services have a socially significant contribution to make to man’s future, whatever that future may hold” (p. 135). She ended with a call to make the science of nursing explicit in research, education, and practice and to share this knowledge with other disciplines to develop “imaginative and forward-looking designs that can lead to improving human health and welfare” (p. 139).

Heady stuff in 1970 and not within the mainstream of nursing.

AML: Wow, what a visionary, and this brings us to the famous 1992 article.

Readers tend to gravitate toward a book as a definitive source over an article, yet the common wisdom among Rogerians is that the book should be set aside in favor of Rogers’

1992 article in Nursing Science Quarterly. What are the major changes that occurred between publication of *An Introduction to the Theoretical Basis of Nursing* and “Nursing Science and the Space Age”?

VM: Rogers had 24 years left on earth to think, revise, vision anew. Throughout her work Rogers found difficulty finding the right words to express her meanings. She said many times that 3/4 of the pages in the 1970 book should be torn out, as they were sadly outdated. In later years she thankfully moved away from the male noun and pronoun, prevalent in her time but sexist and off-putting in current times and talked about the all inclusive unitary human beings. She also dropped the idea of life process in favor of human-environmental field mutual process, making explicit its unitary nature.

A linear process did not reflect her thinking, no from here to there if the field is everywhere, so she modified any wording that suggested it, such as unidirectionality. The postulated correlates of unitary human development were problematic in terms of how to best express her thinking. In a 1978 class handout they appeared with headings of “From” and “In the direction of,” again a linear process which was not what she wanted to convey. In a 1982 handout she tried “Change from” and “In the direction of,” still not getting at what she wanted to convey. By 1983 she had dropped all headings and just left the three columns. By 1985 she had dropped the word “correlates” and now called these rhythmical expressions of pattern the “Manifestations of Field Patterning in Unitary Human Beings,” manifestations of relative diversity in field patterning that arise out of the human/environmental field mutual process and are continuously innovative.

Because the human-environmental field process is integral, unitary, inseparable, she dropped language that suggested separation, so “exchanging,” “energy exchange,” and

“interaction” went. That meant mutual simultaneous interaction (MSI) had to go. She tried continuous mutual process (CMP) for a while but ended with mutual process as saying it all. She eliminated space-time because so many readers interpreted it as Einstein’s space-time. As early as 1971, in a paper she delivered on the theoretical basis of nursing, she identified what she saw as misunderstandings of four-dimensional space-time and used the word “multidimensional” instead.

Another word that appeared in the 1970 book but was later deleted is repatterning. As a prefix, “re-” conveys going back or repeating something. For Rogers, although there may be similarity there is never repetition or sameness. You can twist the slinky back, but the path is still different, not the same as before. The operative words are pattern or patterning to convey continuous, creative, innovative change. She dropped organization from “pattern and organization” because it was too static a word, as the pattern is continuously changing. For Rogers “homeostasis” was an outdated term, so she introduced “homeodynamic” to describe what she then called the life process. By the mid-1970s the four principles became three. She retained helicy and resonancy but replaced synchrony and reciprocity with the principle of complementarity, defined as the mutual, simultaneous interaction of the human and environmental fields. Rogers realized that the ideas contained in the four could be condensed into three principles that described the nature and process of change, and also found that readers were interpreting reciprocity and synchrony according to their usage in other disciplines rather than how she intended them. This would become the case with complementarity as well, ultimately changed to integrality.

Rather than the five assumptions in 1992 Rogers identified the postulates, formerly building blocks, of energy fields, openness, pattern, and pandimensionality. To get to

pandimensionality she first passed through four dimensionality, ultimately rejected because, again, folks were interpreting it as Einstein's 4D, and multidimensionality, as indicated earlier probably first used in a paper describing her nursing science at the University of Illinois School of Nursing in 1971, and probably last used in her 1990 chapters that appeared in Barrett's *Visions of Rogers' Science-Based Nursing* and Parker's *Nursing Theories in Practice*.

Pandimensionality first appeared in the Winter-Spring 1991 issue of *Rogerian Nursing Science News*. Rogers said she finally got it, 21 years later. She said she had never liked either four dimensionality or multidimensionality because, again, four dimensionality was associated with Einstein and the prefix "multi-" conveyed pieces or parts. The prefix "pan" represents a bringing together, with words like "all," "union," and "whole" appearing in dictionary definitions of pan in combination forms. Martha and a few of us had a discussion of whether it was pan-dimensional with a hyphen or pandimensional one word, ultimately deciding on one word.

Another important point about the 1970 book is that Rogers talked in traditional terms about research: describe, explain, and predict in studying the life process as a phenomenon of wholeness. She later eliminated prediction, consistent with the acausal nature of Rogerian science and her early emphasis on uncovering relationships. She also changed from the language of probabilistic to unpredictable in describing the change process. This has led to discussions in Rogerian circles about whether or not quantitative methods are appropriate and, if they are, how to describe findings without using causal terminology.

When I was in the doctoral program at NYU, I started in the fall of 1976, my failure to take the Science of Man earlier caught up with me, and I had to take it as a prerequisite to the doctoral course which she taught. Rogers introduced us to the idea of worldviews in nursing, first time I'd ever heard this, always with two identified, first as her worldview and everyone else's

worldview, then soon after as the new worldview and the old worldview. A new worldview suggests a new reality, and a new reality means that the relevant questions change along with potential answers, again think of Kuhn's scientific revolution. She titled this handout "Some Differences Between Older and Newer Views of Man and His World," not yet moving to the language of unitary human beings. The one I first saw is slightly different from the one she finalized in the 1992 article, but here she compared her new ideas with traditional ones, moving, for example, from cell theory to field theory, from an entropic to a negentropic universe, from man:homeostatic to man:homeodynamic, from adaptation to mutual simultaneous interaction (the old MSI), from man/environment: dichotomous to man/environment: complementary, and from dynamic equilibrium to innovative growing complexity. She had us write Ah-Ha papers juxtaposing one characteristic from the new and old worldviews, due whenever we had a creative insight rather than on a specific date, as few can produce a creative insight on demand, as long as they came in by the end of the semester. They could only be three pages long. If you were foolish enough to leave some really good ideas for page 4 you were out of luck, as she stopped reading at the end of page 3. I remember choosing dynamization of space, new worldview, vs. spacialization of time, old worldview, as my first one; didn't work out too well, and she later dropped it anyway from new and old worldview characteristics.

It was hard to keep current with Rogerian nursing science for those who were not at NYU or in contact with someone at NYU or with Martha herself, as her next theory publication did not appear until 1980 in Riehl and Roy.

AML: This was really a groundbreaking evolution. So, the 1992 article in *Nursing Science Quarterly* is the ultimate point of reference for Rogers' Science of Unitary Human Beings. So, the next question is, Rogers published two books in the 1960s, *Educational Revolution in*

Nursing (1961) and Reveille in Nursing (1964), which contained embryonic ideas that would take root in An Introduction to the Theoretical Basis of Nursing. However, she did not publish anything further on nursing science until her chapter, “Nursing: A Science of Unitary Man,” which appeared in the 1980 Conceptual Models for Nursing Practice edited by Riehl & Roy, as you indicated. What was she doing during those intervening 10 years?

VM: Rogers delivered a number of papers at venues across the country on her science, nursing research, educational issues, and political and legislative issues, as well as authoring a number of articles on topics other than nursing science. For example, she authored an article entitled “Legislative and Licensing Problems in Health Care” that appeared in a 1978 issue of *Nursing Administration Quarterly*. In a 1975 *AJN* article she took the con position to the idea of nursing coming of age through the nurse practitioner movement. In a 1978 issue of the Health-PAC Bulletin, she even had a letter published entitled, “Peer Review: A 1985 Dissent,” a reaction to an article by a Mr. Jenkins who opposed the New York State Nurses Association (NYSNA) 1985 proposal but for very different reasons. She referred to him as “antieducationist, socially irresponsible, and frequently misinformed as are those persons who are supporting the NYSNA ‘1985 Proposal’” (1978/1994, p. 170). Surprised? Shocked by this last one? Don’t be.

Her view of what constituted professional nursing education was vastly different from that of her peers, including the necessity of a 5-year BSN program. She believed that nursing educational systems actually prepared for three levels of nursing practice, each different from the other, yet there was licensure for only two, i.e., the registered nurse prepared in hospital schools and associate degree programs, and the practical nurse. She believed in the need for a third level of licensure, writing “*No licensure is provided for the baccalaureate level of practice although human safety requires the knowledgeable judgments afforded by baccalaureate education in*

nursing” (1978/1994, p. 170). She drew an analogy to dentists gaining licensure based on taking a licensing exam for dental hygienists. She went on to make a number of other points challenging both this Mr. Jenkins, including his oblique reference to Dee Krieger’s graduate course on Therapeutic Touch at NYU as faith healing, and the NYSNA proposal. I’ll segue here into SAIN, the Society for Advancement in Nursing, to which Martha devoted much of her time during the 1970s and early 1980s.

SAIN was birthed in 1974 in a Greenwich Village apartment, most likely Martha’s, where a group of nursing leaders had gathered, including Martha and a number of her faculty. The purpose was to give voice to those nurses who had earned a minimum of a baccalaureate degree in nursing, the first professional degree in nursing. (I’m sure you can still hear the cries of elitism that surrounded SAIN in the general nursing community!) Martha was its first president and afterward continued on as a board member. As Elizabeth Barrett wrote in her introduction to the Professional and Political Issues section of the Malinski & Barrett book, *Martha E. Rogers: Her Life and Her Work* (1994),

Never hesitating to vehemently speak out frankly and informatively, often taking a radical stance toward controversial health and social issues, and never intimidated by other nursing groups, political forces, or the medical-industrial complex, this organization provided a forum for addressing nursing issues, developing position papers, and preparing legislative proposals. (p.122).

Here I’m going to go beyond 1980, the date of her first nursing science publication since the 1970 book, but this is important and shows what held so much of Martha’s time and attention, in addition to heading up nursing at NYU. In 1977 the SAIN Governing Council published in its newsletter a call to differentiate between two careers in nursing with two

different licensing exams, one for the nurse prepared with a minimum of a BS in nursing, the Independent Nurse or IN, and one for the Registered Nurse or RN, prepared in hospital schools or associate degree programs. They supported this by describing what they saw as the differentiation between the two careers in three areas: knowledge base, responsibility, and role, with knowledge base determining responsibility and role.

In 1982 the SAIN Governing Council passed a resolution calling for licensure for three entry levels to practice in nursing. In 1983 they proposed legislation to the NY State Legislature, a practice they repeated a number of times after it failed to pass each time: a Proposed Act to Amend the Education Law in Relation to Requirements for Independent, Registered, and Practical Nursing in New York State. Among other things, this act defined the practice of each level and the requirements for licensure for each. Martha wrote a short piece on the need for licensure to practice professional nursing in the *Journal of Professional Nursing* in 1985.

Failure to establish standards and to license for professional practice in nursing leaves the public prone to being victimized by persons granted baccalaureate degrees in the absence of baccalaureate education, technically prepared nurses who have no professional preparation in nursing, and a health care system that denies professionally educated nurses the opportunity to use their knowledge for human betterment. (1985/1994, p. 193).

John Phillips (2015) was right on target with the title of one of his publications, calling Martha a heretic and heroine.

AML: I wonder what they would call her today. Many have embraced her revolutionary worldview. Now, the last question: What are a few of the most significant scholarly achievements by other nursing scholars that have advanced Rogers' Science of Unitary Human Beings over the years?

VM: It's hard to answer this question without leaving out a lot of folks, so I'll just mention a very few examples. In the early 1980s Barrett (2020) made a seminal contribution with her theory of power as knowing participation in change, a tool to assess it, and a practice methodology, the second Rogerian tool to be developed and the first Rogerian practice method. John Phillips (2015) keeps evolving the science with new languaging, like unitariology, energyspirit, homo pandimensionalis, human field image, and wellbecoming. He is engaged in developing the theory of pandimensional awareness-integral presence, noting that it describes the rhythmical change process inherent in Rogerian nursing science (Phillips, 2016). Howard Butcher derived the theory of kaleidoscoping in life's turbulence (1993) and the theory of aging as emerging brilliance (2003). One of the latest theories is a situation-specific theory of men's healing from childhood maltreatment, with implications for practice using pattern manifestation knowing and appraisal and voluntary mutual patterning generated by Willis, DeSanto-Madeya, & Fawcett.

Butcher (2005), Carboni (1995), and Cowling (1998, 2001) have developed Rogerian qualitative research methods. Others have given us measurement tools to use, just to name a few, we have Paletta's (1990) Temporal Experience Scale, Johnston's Human Field Image Metaphor Scale, Hastings-Tolsma's Diversity of Human Field Pattern Scale, and Watson's (Watson, Barrett, Hastings-Tolsma, Johnston, & Gueldner, 1997) Assessment of Dream Experience Scale. So, Rogerian nursing science is alive and well, as you will hear for the rest of the day. Thank you!

AML: Thank you, Dr. Malinski, for so clearly and explicitly carrying us through Martha Rogers' innovative works and the evolution of Rogers' Science of Unitary Human Beings. I have had a wonderful time conversing with you.

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