## **Book Review**

Music and Soul Making: Toward a New Theory of Music Therapy. By Barbara J. Crowe. Lanham, Maryland: The Scarecrow Press, Inc., 2004. 435 p. + xx. ISBN 0-8108-5143-1.

Through time immemorial, within the evolution of all cultures, sound has occupied a primordial role. Rhythm and music appear evolutionarily earlier even than visual images (Schneider, 1960). Within fetal development, the capacity to hear is anatomically complete by four months, well developed before sight. The second-trimester fetus perceives and retains in memory melodious and rhythmical aspects of the mother tongue, plus inflections and modulations of maternal voice. Object-relatedness is launched by a proto-dialogue in the womb (Maiello,1995), with the fetus negotiating mother's presence and absences through the sound of her voice punctuated by silences.

Given the primitive role of prosody, sound, and music, ranging from the pre-natal reunion/merger with mother to the post-natal union with God in culture, it is little wonder that Barbara Crowe approaches her subject of music therapy with reverence. Crowe's book, *Music and Soul Making*, is replete with inspirational quotes such as Beethoven's, "Music is a higher revelation than all wisdom and philosophy." To Crowe music represents the highest expression of human creativity, with the interaction between people and music the highest expression of human complexity.

The author has been director of music therapy at Arizona State University since 1981, before that holding a similar position at Indiana University-Purdue University at Fort Wayne from 1977. Given her extensive clinical and academic background, Crowe stands in an excellent position to survey the field of music therapy broadly. Her clear dedication to her field shines through in this book, which represents the culmination of a lot of hard work.

This book is everything you ever wanted to know about music therapy—and more. Crowe covers multiple levels of observation, building a case by illuminating elements of music therapy as she builds towards her grand theory. Chapter 1 broadly discusses the role of music

in therapy and healing. Chapter 2 gives a general presentation of complexity theory within the nonlinear paradigm. Chapter 3 covers the acoustics of music and psychoacoustics of sound perception, while the next four chapters apply music therapy from the bottom up, from physiological levels through somatic and emotional levels, culminating with spiritual issues related to music therapy as ritual and social communion.

Crowe traces the origins of modern music therapy back to the mid-1700s. Despite a ripe age of several hundred years old, the field of music therapy remains only a tiny subspecialty within the wide spectrum of physical and emotional healers. Crowe points out how her profession continues to struggle to find adequate theory and research approaches to represent, substantiate and explain the almost magical effects of interventions for its diverse clientele. Music therapy lore brims with the effective use of musical performance and composition for a host of people and problems. These range from making social contact with autistic children to breaking through to antisocial adolescents, calming agitated elders in advanced stages of dementia, and drawing out the neurologically damaged from catatonic stupor.

Despite such dramatic results, music therapy remains in its infancy with respect to a theoretical account for its effectiveness. Behaviorism was appropriated in the late 1960s in an attempt to standardize music theory, with others trying psychodynamic, phenomenological, as well as neurophysiological approaches. More recently, Ruud (1998) suggested a holistic approach, encouraging consideration of the whole person by using a number of theoretical models and research methods based on unique characteristics of and circumstances of clients.

Barbara Crowe's book, *Music and Soul Making*, represents the author's own synthesis of the field of music therapy plus her attempts to unify its elements under the banner of complexity science. Crowe diagnoses the problem in her field to stem from reductionistic attempts to take highly complex, nonlinear and emergent processes and reduce them to their component parts. Crowe suggests the use of complexity theory as an overall framework, broad enough to unify the diversity of theory, sensitive enough to idiographic concerns, flexible enough to consider multiple levels simultaneously. While this seems like a good idea, the reader must wade through more than 300 pages to get to the final chapter and the heart of Crowe's argument, where she presents her scientific theory of music and soul making based on principles of complexity

science. In this chapter Crowe tries to combine analytical components related to empirical research, both qualitative and quantitative, while presenting a larger context that "encompasses the necessary wholeness and interrelatedness of all complex systems" (p. 335).

Here is a taste of Crowe's vision for the practice of music therapy: "...the therapist will act as an agent or catalyst for change by adding aspects of complexity to the intervention. This will be accomplished by adding new and unexpected musical elements to break up rigid patterns of client behavior and routines by providing multiple options, flexibility of response, and immediate adaptability Increasingly, music therapists will recognize that the three-way interaction of music, music therapist, and client has its own unique, emergent property. In this approach, the music therapist focuses on the immediate present and allows the structure to emerge rather than having the therapeutic approach structured in advance...Music therapy will become less prescriptive in terms of results and more involved with the unfolding process of self-organization leading to change and improved health...With increased understanding of music therapy's sensitivity to initial conditions and small changes, the importance of all the musical factors present in the music therapy session will be acknowledged (p. 349-351)."

Throughout the book, Crowe's use of complexity theory ranges from loose, metaphorical understandings, including generalizations based on popularized accounts, such as Briggs and Peat (1989; 1999), to highly technical studies regarding neural dynamics and nonlinear psychophysics, such as Gregson (1996). This unevenness is reflected throughout the book, with science that veers wildly from empirically sound results to New Age speculation about energy fields.

The basic premise of Crowe's book is excellent—that a framework of complexity science is a solid, holistic approach towards understanding what music therapy is and how it works. Yet Crowe stops short of offering specific nonlinear methods for approaching tricky problems of the field, such as how to match problems with specific interventions, how to track the therapy processes with time series analyses, or what to look for when measuring the neural impacts of interventions. Instead Crowe almost uses complexity science defensively, as a way to justify the historical difficulties capturing the processes of music therapy analytically and empirically. Appealing to the uniqueness of each intervention, Crowe seems to claim that the novelty of its emergent dynamics implies processes beyond measurement or validation.

Crowe's book is ambitious and the author has clearly put a lot of thought and hard work into its making. Unfortunately it's neither an easy nor a pleasurable read. For a holistic approach, the book has a fragmented feel to it. There is something disquieting about having all the elements of music therapy dismantled before being put together again only at the very end, in the last 27 pages of a 360 page book, all in the name of anti-reductionism.

While the critical elements appear to be present, they are not synthesized very elegantly. The book fails to spark interest outside of its own field. One must be a convert from the beginning, believing in the incredible power of music to heal, either because it has already healed you or because you are a healer who has borne witness to its healing power. The spiritualization of music asserted over and over gets rather tiresome. The argument from chaos theory regarding sensitive dependence on initial conditions—that tiny elements can have huge and unpredictable effects—feels manipulative in the absence of more grounded clinical stories to support this in action. Rather it feels more like a rationalization for the importance of music despite the tiny role it ordinarily plays in physical and emotional healing. But then, this reviewer is a clinical psychologist and not a music therapist.

At the same time, Crowe does have many interesting thoughts, such as music as an emergent property of its elements—many performers playing different notes in different parts; music relating to other natural phenomena, like earthquakes, volcanic activity, and flow rate of rivers, existing in an intermediate zone edge of chaos phenomena through its 1/f spectrum. "Because music is an intermediate between randomness and predictability, it exists at the edge of chaos, the place in our natural world of optimum vigor, information, and potential. The essence of music is its subtle reflection of nature—from the workings of the mind to the essential nature of the universe (p. 93-94)."

I suspect that Music and Soul Making will prove most important as a resource book for students of music therapy. Perhaps, with a captive audience that is required to study all the elements Crowe presents, the book may even reach the level of the "Bible" in her field. And if it succeeds in spurning and inspiring others to approach problems and challenges in the field with the use of nonlinear approaches and idiographic methods, all of Crowe's hard work will not have been in vain.

## REFERENCES

Briggs, J., & Peat, R.D. (1989). Turbulent mirror. New York: Harper & Row.

- Briggs, J., & Peat, R.D. (1999). Seven life lessons of chaos: Spiritual wisdom from the science of change. New York: HarperCollins Publishers.
- Gregson, R. (1996). N-dimensional nonlinear psychophysics. In E. MacCormac & M. I. Stamenov (eds.), *Fractals of brain, fractals of mind* (pp. 155-178). Philadelphia: John Benjamins North America.
- Maiello, S. (1995). The sound-object: a hypothesis about prenatal auditory experience and memory. *Journal of Child Psychotherapy*, 21, 23-41.
- Ruud, E. (1998). Science as metacritique. *Journal of Music Therapy*, 35, 218-224.
- Schneider, M. (1990). Le rôle de la musique dans la mythologie et les rites des civilizations non européennes. [The role of music in the mythology and rituals of non-European civilizations]. Paris: Gallimard.

- Terry Marks-Tarlow Santa Monica, CA e-mail: markstarlow@hotmail.com