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Karen D. Goodman

# **MUSIC THERAPY**

Karen D. Goodman

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## **MUSIC THERAPY**

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#### **Historical Use of Music in Healing**

From ancient times music has played an essential role in the humane treatment of individuals with mental, physical, and emotional illnesses. The design of this treatment is fascinating because it not only parallels the evolution of civilization but also the evolving integration of "magical" and scientific healing.

The primordial imitation of, and subsequent identification with, certain sounds in the environment (wind, rain, waves, trees, animals) gave primitive man access to nonverbal communication with his "invisible world"—a "supernatural, magical" world which, he was convinced, controlled his wellbeing. Healing rites, consisting of music, rhythms, songs, and dances, were led by a "magician" who was conversant with the formulas for communicating with the "spirits." Eventually, ancient man moved from magical healing via music to religious healing via music—still utilizing music as a communicative language with the supposed sources of disease rather than recognizing the specific ability of music to affect man's psyche and soma. As it was written in the Bible: "Seek out a man who is a cunning player on a harp [David]: and it shall come to pass, when the evil spirit of God is upon thee, that he shall play

with his hand and thou shalt be well." (Samuel I, Chapter 16, verse 16).

Practices found in the medical tradition of ancient Greece represented a similar divergence of attitudes. The Greeks used music and musical instruments, believed to be gifts from the gods, to propitiate deities they had created in their own image. Incantations, songs, and music were a standard part of Greek and, later, of Christian ritual. Also available were environmental healing treatments involving supplications for help from the gods. At some 420 temples of Aesclepius the basic treatment consisted of ritual purification, special diet, and sleep-inducing drugs, with a musical background as an integral component of the dreaming/sleeping period.

At the same time, rational and scientific ideas about music and medicine were being developed by philosophers. Cassiodorus, Plato, and Aristotle attributed certain emotional and ethical characteristics to various musical modes. Socrates referred to the subliminal action of intoxicating music, and Aristotle recognized the cathartic power of music. Plato introduced the idea of specific harmonic modes, instruments, and rhythms affecting the human psyche (*Republic*, III) and suggests specific musical "recipes" for such afflictions as Korybantism and insomnia.

These elementary Greek concepts of music therapy, "a kind of psychotherapy that affected the body through the median of the soul," were

not isolated phenomena. In scrutinizing the history of psychiatry, it is striking to note that almost all of the humane treatment movements have included music as either a specific or nonspecific therapy. The tradition appeared in Baghdad (eighth century, A.D.), Damascus (ninth century), Leleppo, Kalaoma, Cairo, and Fez as part of the Arabic-Hebraic medical tradition (thirteenth century). As early as 1100 B.C. travelers returning from the Middle East to Europe reported "humane" psychiatric treatments that carried on the Aesclepian tradition. An essential part of treatment was the concerts in which the instruments were tuned in a special way so that they would not jar the patients' nerves—an example of the gentleness and humanity of these ancient institutions.

While this Arab and Judaic tradition had some impact on the Christian practice of medicine developing in Europe in the Middle Ages (for example, the Salerno Medical School founded by Constantinus Africanus), it was overshadowed by the prevalent attitude that the mentally ill, labeled as evil, were to be punished rather than helped.

The emergence of the Renaissance revitalized the use of music therapy in terms of physiology and psychology. Moreover, the possibility of man's self-actualization via the arts was recognized in that the patient was encouraged to express himself through a musical experience. Obviously this experience was still not fully understood in relation to the therapeutic growth of the

psyche, soma, and/or interpersonal relationship between therapist and client. The part the musicians themselves played in music therapy was to remain largely empirical until shortly after World War II.

#### **Music Therapy as a Profession**

As a distinct discipline, music therapy contributed to the holistic point of view prevalent in the treatment of disease after World War II. Before and during the war, musicians had been encouraged to use their talents purely for morale purposes. However, the need to assess the influence of music on behavior, its relationship to psyche and soma, and its potential as a specific treatment process required validation in the scientific age. Music therapy developed into a profession with recognized institutions (National Association of Music Therapy established in 1950, American Association of Music Therapy established in 1969), a degree (B.A., M.A.), internships, registrations (Registered Music Therapist, Certified Music Therapist), textbooks, and journals (*The Journal of Music Therapy*).

Many of the initial music therapists were music educators with training and experience in public school music. Musicians from other backgrounds joined them, and they and representatives of other professions— primarily representatives of schools of psychiatric and psychoanalytic thought, clinical psychology, milieu and attitude therapy (Menninger Foundation)—

contributed to the field of music therapy. Continuing research cast doubts on beliefs on which earlier clinical practice had been based. Several popular concepts—that specific music will predictably stimulate or sedate patients, that background music increases verbalization in therapy groups, or that learning of other subject matter by retardates can be enhanced by utilizing their specific musical abilities— were not supported by research.

The effect of music therapy research on clinical practice led to diversification as some practitioners altered older methods while others turned to new ones. While the mainstream of music therapy in the fifties and sixties remained only supportive, pioneers in the field developed a profession with additional depth. In Europe, Nordoff and Robbins, beginning their innovative improvisation work with multiply handicapped children, made a great impact in America by establishing a humanist tradition as well as a musical therapeutic rapport between client and therapist. Such innovators as Florence Tyson and Mary Priestley began to translate these concepts into clinical practice, embodying the analytic model suggested previously, as well as contributing a wealth of new material. Work with the adult psychiatric population was now beginning to take shape. The suggestion that musical imagery was as valid as dream imagery was utilized in clinical practice by Dr. Helen Bonny who opened the Institute for Music Consciousness and Research in Baltimore, Maryland. In the 1970s, clinicians realized the need for specialized approaches in music therapy. Specialized music therapy now

existed for the hearing-impaired, aphasic, autistic, severely/profoundly handicapped preschooler, and criminal offender. Indeed, specialized music therapy offered a variety of clinical orientations including psychoeducational, behavior modification analytic, and eclectic. Tremendous variety of age (infancy to geriatric) and handicap of clientele, as well as influences from shifts in institutional treatment philosophies and methods, have provided a plethora of approaches to music therapy.

Most music therapy was and is practiced in institutions for psychiatric and retarded patients, although settings presently include educational institutions, nursing homes, private practice in conjunction with psychiatric practice, alienated subsystems in communities (such as addiction treatment centers and prisons), and outpatient and inpatient clinics for treatment of the physically handicapped.

The field of music therapy is a "changing elastic diversity of clinical activities and points of view, carried out by a polyglot inclusive group whose bond remains the use of music for the benefits of the sick and disabled."

#### Music as a Tool

Music is the art of sound in time, expressing ideas and emotions in significant forms through the elements of melody, harmony, and color. Tones or sounds occur in single line (melody) or multiple lines (harmony) and are

sounded by voice(s) and instrument(s). Appreciation of or responsiveness to musical sounds or harmonies is inherent in the concept of music.

There is no doubt that a medium that affects the emotions, endocrines, circulation, respiration, blood pressure, mood, association, and imagery of man can and must be used to meet specific needs in clinical practice. With this in mind, a body of music therapists, psychologists, psychiatrists, neurologists, pediatricians, physiologists, speech pathologists, and numerous others continues to examine the ways in which music affects individual physiological and psychological processes in man.

One vital aspect of the biological foundation of music is the separate roles of the right and left hemispheres in music perception. The investigation of hemispheric roles and dominance, and the implication for education, culture, and creativity is nothing new. However, this investigation takes on added significance in regard to neurologically impaired or suspected splitbrain individuals who express themselves well through music. Music may prove a means of transfer between left and right hemispheric functioning. Left and right hemispheres are employed differently in the musical process. The right "metaphoric" hemisphere, notably intact in many neurologically impaired clients, is responsible for major aspects of musical perception and musical behaviors; that is, the recognition of pitch, a gestalt sense of melody, rhythm, style, and musical memory.

The commonalities between the components of speech and music are a basis for the perceptual processes of the right hemisphere, which influences language functions and behavior. The left hemisphere is predominantly involved with analytic, logical thinking, especially in verbal and mathematical functions. With someone who is musically sophisticated the left hemisphere

dissects its passages in a manner analogous to the feature-detecting capacity of the left hemispheric visual fields. In other words, the right hemisphere, in effect, thinks, "ah, yes, Silent Night," two Columbia psychologists report, but the educated left hemisphere thinks, "two sequences, the first a literal repetition, the second a repetition at different pitch levels—ah, yes, Silent Night by Franz Gruber, typical pastorale folk style." [p. 7]

This assumes the processing involved in score-reading and score notation as well as mediating temporal order and acuity.

The neurological potential for music processing to relate to the emotional life of any individual is enormous. Altschular says:

The thalamus is a main relay station of emotions, sensations, and feelings. It is believed that even aesthetic feelings are relayed by the thalamus to the master brain. The thalamus is connected to the master brain by nerve pathways, and the stimulation of the thalamus almost simultaneously arouses the master brain. Once the brain is aroused, it sends impulses back to the thalamus and thus a reverberating circuit is set in motion. We can conclude then that music arouses our emotions, [p. 29]

As an effective response, evidenced physiologically, music leads to alterations of blood pressure; changes in respiration and pulse, the

cardiovascular system, and galvanic skin response; lowering of the thresholds of sensitivity to other forms of stimulation; and delay of the onset of muscular fatigue. Why music has this power, what exactly it is about music that is responsible for its effects, and how one can effectively tap music's power to utilize it therapeutically still remain open questions although a wealth of information on the subject is available. Generalities of human affective responses exist but only to the degree to which individuality of physical, organic, psychological, and experimental differences come into play.

As parts making up the whole, melody, rhythm, and harmony each have a vital, purposeful origin in the history of man and a psychological significance in the form or lack of form they present.

Melody appears to have its origin in primitive man's sound language—the sounds with which he reacted to external stimuli and expressed affect. As the only instrument belonging to man, voice, able to produce both melody and rhythm, best represents the "hidden person, his individuality, his uniqueness." As a primitive response, melody appears as the first "informal" music experience of the child when his voice assumes differentiated crying and then vocal contagion/babbling. The infant's attendance to the timbre of the mother's voice is an initial melodic and affective experience: "With its constant rising and falling and many inflections, it [melody] approximates the affective component of the endocept. The 'breathing' of melody approximates

some of the physiological concomitants of emotion."

As primitive and childish melodies (feeble, poorly organized, lacking in definite affective significance and nuance) take "shape," they logically feed into definite tonal relationships (intervals) which resolve on a key note. Modes, the selection of tones within a scale, will vary from culture to culture. Most common in this country are the major and minor scales. The timbre or quality of sound offered to the child by the human voice may prove either pacifying or disquieting.

The choice of tone relations in a melody provides many possibilities for psychological tension and relief—the frequency of and distance between consonant and dissonant intervals; the direction of movement toward consonance; the size of the intervals (small intervals, except for semitones relieving tension); the movement/direction of the intervals (ascending tones being generally more tension laden); the fulfillment of tonal expectation based on past association; and resolution to the lower tone of a successively played interval and/or the lowest point of a descending melodic line. Through our experience with probabilities in sound, our expectations concerning music develop.

Rudolph Steiner relates the choice and directionality of intervals to dance movement in the art of eurhythmy, in which particular sounds and

intervals assume physical postures and cathartic emotional value.

Once perceived as a Gestalt, the familiar movement of the melody is repeated in the song and may be perceived consciously or unconsciously.

Rhythm, the feeling of movement in time, with its implication of both regularity and differentiation, is, like melody, primordial. Rhythm is of biological origin, beginning prenatally when the fetus produces rhythmic heartbeats, chest movements, and limb and body movements. Sounds transmitted by vibrations are responded to by the fetus in the third trimester. The information suggesting that rhythmicity is at least "hard wired" into the circuits of our brains is well founded: witness the seasonal or monthly cycles or even diurnal rhythms in depressives; the basic rhythm of the rapid eye movement of the sleep cycle; the obvious microrhythms of heart rate, respiration, and brain wave activity; the various cries that change in rhythm at different periods of life; the predictable rhythms of spontaneous neonatal mouthing and sucking activity; the mannerisms and stereotypies of neonatal motor patterns; and the movement patterns and rhythms found in each dynamically invested phase of development. These and related studies may be potential diagnostic tools not only for music therapists but for the entire medical profession.

Gaston said, "without rhythm, there would be no music, for its unique

potential to energize and bring order is seen as music's most influential factor." According to Gaston, "rhythm is the primitive and driving factor of music." The manner in which rhythm is indicated or expressed by an individual determines to a large degree the amount of energy invested in responding to music. Rhythmic patterns between mother and infant impart to some individuals an emotional message. Later, rhythmic interaction with another person can become a dynamic medium for self-expression reflecting the earlier experiences as well as being a means of relating to another person.

The choice of rhythms in a given piece of music, whether it be a listening or performing experience (precomposed or improvised), again lays bare psychological possibilities for tension and relief. The predictable accented interplay between basic beat (meter) and melodic rhythms, the stability and consistency of basic beat, and the gradual evolution of tempi changes (much faster or slower tempi can be tension laden) are all indicative of a need for order, control, and security. This pleasure in order and control is an orientative Gestalt for the mind as well as the body: "the ultimate foundation of rhythm is to be found in mental activity." This supposition concerning mental activity and organization of rhythmic impulses led the music therapy pioneers, Paul Nordoff and Clive Robbins, to suggest relationships between rhythmic response and emotional and/or physical difficulties in hundreds of handicapped children.

As previously mentioned, music is fundamentally melodic, and so it is not surprising that the possibility of simultaneous combinations of tones, that is, harmony, was only gradually appreciated and understood. As a direct qualitative experience, a chord possesses its own "color." There may be tension and/or relief in an emotional reaction to one chord. However, it is more common to perceive a succession of harmonic devices as tension or relief provoking. The Western listener, unacquainted with alternative means of harmonic movement, expects to hear the consonant root progressions inherent in music of the European tradition. Various listeners and cultures have retained subjective definitions of consonance and dissonance in spite of numerous attempts to provide an objective definition. As consonance is thought to produce "an agreeable effect" and dissonance "a disagreeable effect," the composer arouses tension by delaying the consonant and/or presenting the dissonant. "Either too much tension or too much relaxation can be fatal. Excessive consonances produce stagnation, while too many dissonances often result in 'irritation', undue restlessness. Dissonances in music furnish an element of motion or progress, and keep the mind and the imagination of the hearer aroused." Initial contact with sound occurs at birth, assuming different qualities and producing different affective states contributing to the satisfaction of bodily functions. As the infant develops, different sounds and auditory impressions become associated with different responses and create definite emotional reactions within the child. According to Nass, the ego has simultaneous adaptive functions, and the "early listening and hearing experiences may serve to master the outside world." Thus, the ego can function to re-experience early phenomena, as well as the present experience of listening during a therapeutic situation. For some, the recreation of a way of "being with another person" based on early sound experiences, comes through music—melody, harmony, and rhythm.

#### **Music as a Therapeutic Process**

In therapy, the music session is the ongoing context within which the relationship between client and therapist is formed and the individual personality elucidated. Both active and passive involvement with music provide therapeutic opportunities that have been translated into clinical practice within the last three decades.

Listening to music is essentially a selective response in which some elements of the musical experience become dominant while others are subordinated. This attendance to certain elements of music varies from individual to individual and is, in most cases, not conscious. According to Mursell, extrinsic factors in listening include: (1) the general mood or affective set of the listener, which is reinforced and/or prevailed upon by the music (only when the listener's affective state is very definite, strong, and in sharp conflict with the prevailing mood of the music being presented, does it

constitute a disturbing factor); (2) the flow of association and the arousal of imagery usually based on the mood and emotions elicited by the music; and (3) the visual stimulation provided by the musician. The intrinsic factors in listening, in order of their priority, include shifting volume and quantity of tonal content; the Gestalt of the melody, rhythm, harmony, and the general architectonic design of the music.

With the great majority of listeners, attendance and emotional reactions to intrinsic factors of listening are not controlled and usually exist on a level that is apparently not conscious. Meyer attempted to clarify the role of mental organization of rhythmic and melodic stimuli, expectation and learning, and psychological "norms" of necessary repetition, resolution, good continuation, completion, and balance of tension and relief. The ability to recognize and respond to these components of the intrinsic listening experience may prove to be a key diagnostic factor in work with mentally disorganized clients.

As music "activates tendencies, inhibits them and provides meaningful and relevant resolutions," it will effect tension or relief. Any state of suspense in music, resulting in expectation, can provide positive excitement in leading up to a resolution and/or negative upset in further delaying or blocking a resolution. It has been speculated that the greater the familiarity of a person with a certain piece of music or the higher his musical training in general, the more he will enjoy musical sequences of greater unexpectedness and

complexity. In addition, the effects of repetition and familiarity will provide an internal sense either of more mastery over the music or of eventual boredom since there no longer exists any tension. How increased tension can become pleasurable is a problem that has puzzled psychoanalysts for years. Miller provided us with an analytic interpretation of tension and relief via the music experience: Increased tension is the result of the musical elements symbolically disturbing the listener's degree of ego-mastery. According to Meyer, the ego-mastery is upset when control over the predicted resolution of the music is temporarily or permanently lost. According to Miller, "Egomastery is symbolically disturbed during music by the listener being reminded of previously disturbing situations such as environmental noises (frightening and unexpected sounds), forbidden id impulses (sexual and aggressive sounds), ego failures (complex and difficult sounds), and super-ego pressures (unconforming and inartistic sounds)." Increased tension can become pleasurable when the listener realizes emotionally that the music is only "make-believe" and not threatening to the self; the eventual regaining of mastery over the music situation leads to decreased tension. "Ego mastery is attained in music when sufficient defensive energy is invested to understand, overcome and re-master the symbols disturbing situations."

The ability of music to portray multiple, even opposite, emotions simultaneously makes it possible for music to become deeply meaningful to the listener in both positive and negative ways. The connection for these

feelings may be the world of imagery and associations. In many cases, the submerged memory of a particular event and/or feeling is triggered by a song or instrumental composition associated with the memory. The therapeutic value of reawakening feeling in order to re-experience and elucidate it is a key feature of music therapy. Frances Hannett, reviewing the significant themes of American popular songs during the early twentieth century, pinpointed a primary (69 percent) thematic reference to an unfulfilled love relationship (that is, mother-child). She also pointed out the value of a patient spontaneously singing, whistling, or hearing a song as a means of conveying emotions and feelings not being directly expressed.

Musical daydreaming, attention to the suggestions and associations of music and to its "meaning beyond itself," may be viewed as the symbolic expression of unconscious feelings and contents. As dreams are valuable interpretative material for the analyst, so musical daydream, arising from the emotional reactions a piece of music elicits, can prove valuable interpretative material for the music therapist. It is on this basis that Guided Imagery in Music (GIM), a process involving "listening to music in a relaxed state for the purpose of allowing imagery, symbols and deep feelings to arise from the inner self and then be used for therapeutic intervention or self-understanding," was developed by Helen Bonny, R.M.T. at the Maryland Psychiatric Research Center in Baltimore, Maryland.

The reader will keep in mind that although the direct effect of a music listening experience may be to provide pleasure in and of itself, this superficially therapeutic "music to sooth the savage beast" notion does not at all fulfill the real purpose of therapy—to promote behavioral change of longstanding value.

#### **Performing Music**

Certainly our greatest concern is to encourage personal expression by the music therapy client by means of either formal (precomposed) or informal (improvisational) active music experience. Whether it be vocal, instrumental, or involving movement, the perceptual, cognitive, motor, and emotional processes incorporated into music performance make it an ideal therapeutic opportunity:

The voice represents the hidden person, his individuality, his uniqueness. To be born means to become sounding, to have a voice means to be something which has its own growth, its own development. . . . The primitive or modern player has always identified himself with his instrument, which is a prolongation of his body and transforms into sound his psycho-motor impulses and liberates them. The manipulation of an instrument demands also conscious control of movement in time and space and obedience to certain laws of acoustics. The process has a well-known therapeutic value, [pp. 19-20]

Contrary to popular opinion, the music therapy candidate is not necessarily a trained musician. However, musicianship can develop.

According to the "Musical Communicativeness" evaluation scale of Nordoff and Robbins, vocalization on a low level of response includes "fleeting reflexive sounds that echo some parts of the music; brief sounds that have a connection with the music, tonally and/or rhythmically and/or expressively"; instrumental on a low level of response includes "[drum] beating [that] is compulsive, impulsive, disordered, or totally uncontrolled, yet. . . shows fleeting reflexive effects of the music—beating [that] is discontinuous, infantile, poorly coordinated, or sporadic, yet . . . shows some slight influence of the music"; movement on a low level of response includes "brief excited movements such as running, jumping, stamping, hand and/or head movements in response to particular musical stimuli—habitual movements show slight, irregular changes in tempo, intensity and duration; compulsive rocking or twirling patterns give way briefly." In other words, the "music child" has yet to be formed but indicates some instinct for potential music making. In addition to acquiring and/or integrating the developmental prerequisites (cognitive, motor, emotional, perceptual factors) necessary for each ensuing stage of musical communication (with the therapist and/or peers) and expressiveness, the music therapy client will spontaneously incorporate aspects of his or her personality into the music he or she chooses, physically maneuvers, interprets, and/or communicates with the therapist. Further spontaneity can proceed by improvisation with the therapist through movement, drama, vocalization, and/or instruments, The

incorporation of the performer's personality into his music may demonstrate a parallel or contradictory picture of the client's extra-musical personality in need of further elucidation and healthy integration. In the same way, the client's formal composition efforts—the notation and reading of musical ideas —are autobiographical. "The tonal dream awake" is a direct avenue to personal symbolic expression.

#### Relationship to a Previously Established Theoretical Framework

#### **Music Therapy and Piaget**

In an attempt to translate into clinical practice firm methodologies for music therapy with various populations, it is apparent that musical experience and development can and must ultimately fit into an affective and cognitive framework. In this way the relationship between musical experience/expression and human development is not only strikingly demonstrated but also serves the clinician in establishing relationships between developmental goals and musical objectives.

From the cognitive-structuralist viewpoint of Piaget, one may theorize that musical development evolves through the same stages as other realms of knowledge: a sensorimotor stage (from birth to eighteen months) during which children simply emit sounds and react to changes in sound; a symbolic

stage (ages two to six) when sounds begin to acquire communally shared meaning; a concrete operational stage (ages seven to eleven) when children can voice to one another a set of organized patterns of sound; and a formal operational period (age twelve and up) when they can reflect on how music works, analyze a composition, and freely invent new patterns.

Already, researchers have begun to confirm the effectiveness of an interrelated cognitive-musical framework approach both in music education and in music therapy. Ewing seems to have translated into clinical practice the even more specific stages of musical development in the first five years of life that were outlined by Peter Ostwald.

While musical precocity is often attributed largely to hereditary factors (and individual differences in musical ability among young children are tremendous), the stages of musical development suggested by the Piagetian framework are applicable for the general population. It is, of course, important to remember that musical precocity and, at the very least, "normal" ability are found quite frequently among children who are not intellectually outstanding and, in many cases, are retarded. Autistic children, in particular, are stereotyped for their unusual musical capacities which, when developed into communicative patterns, provide the first step in remediation of a serious emotional illness

A supplementary effort on the part of Heinz Werner is much more informative about the distinctive features of musical development. Focusing on the musical aspects of children's melodies, Werner examined the ascending and descending movements of melody, the role of repetition, the emergence of cadences, and the handling of phrasing. According to Gardner

This fine-drawn analysis revealed which aspects of melodies were most salient for children at a young age, and which aspects appeared spontaneously— i.e., that resting on a lower note is a constant throughout melodic production, presumably reflecting a fundamental tendency in vocal production, but that ability to use and vary cadences waits upon the ability to repeat a simple motif.

Even with these initial studies, Werner substantiates the relation between musical development and other aspects of linguistic and cognitive development.

#### Music Therapy and Personality Theory: The Analytic Framework

In general, the conceptual basis for a psychoanalytic theory of the arts relies upon: (1) the libido as an energetic source; (2) the transformation of unconscious content in analogy with dreams, imagination, and humor; (3) the dominance of the sublimative mechanism; and (4) the relative flexibility of the repressive mechanism. These factors must all be considered specifically in relation to music—the most formal of the arts.

According to Noy, "The problem of defining the significance of forms by relating it to the analysis of the content implied in those forms presents the major challenge facing the analytical theory of art today." This problem is further compounded if one considers music "contentless" and/or "objectless." However, Suzanne Langer provided a convincing argument that music is indeed a symbolic language even though its content may seem unfathomable much of the time. Music lends expression to the world of feeling; it is a symbol and its symbolized object is the emotional life.

The tonal structures we call "music" bear a close logical similarity to the forms of human feeling— forms of growth and of attenuation, flowing and stowing, conflict and resolution, speed, arrest, terrific excitement, calm or subtle activation and dreamy lapses—not joy and sorrow perhaps, but the poignancy of either and both—the greatness and brevity and eternal passing of everything vitally felt.

Such is the pattern of logical form, of sentience; and the pattern of music is that same form worked out in pure, measured sound and silence. Music is a tonal analogue of emotive life. [p. 27]

As a language that represents emotional life rather than ideas, music is "much more liable to evade the defenses and to reach the unconscious"; in this way it may "safely become an object of displacement rather than language."

If one does indeed accept music as a language safely lending symbolic expression to unconscious contents (although definition of these contents is difficult to fathom), then one can also accept the likelihood of perception of

music through primary and secondary process. Researchers' have written about a musical secondary process (the tune) uncovering a deeper musical primary process (the rhythm) and have even suggested that primary process mechanisms—displacement, condensation, inversion, repetition by the opposite—are musically operative. Many questions remain however: Why does the unconscious want or need to achieve tonal represervation? On what level does the translation process of the unconscious content into tonal structure take place? What is the nature of the motive or desire to find expression and gratification in music?

Perhaps part of the answer to the last question can be found by recognizing the roles of the id, ego, and superego in musical expression. From the point of view of the developmental hierarchy of psychological stages, the meaning of music "... is derived from its capacity to allow subtle regression via extraverbal modes of psychic function." The id is served by music since catharsis of primitive impulses is transformed into an emotional experience. The ego is served by music since organization and hence mastery of sound impulses is achieved; music is, in this sense, a form of play. The superego is served by music since an expression of rules to which one submits becomes a task to be fulfilled as well as an aesthetic experience. The elements of music themselves serve to satisfy the libido. In summary, rhythmic repetition and emphasis are a pleasurable means of discharged energy. Melody, produced under muscular tension in the tones of the human voice, also produces this

effect; and harmony provides an additional and increased enjoyment since a number of items concur in any simultaneous expression of pleasure.

Further evidence to satisfy the question of motives in finding expression and gratification in music is found in the writings of Maslow and Jung. Maslow's hierarchy of human needs—physiological, safety, belonging, esteem, and self-actualization—are all within the capacity of musical experience. Jung's four functions of the psyche—thinking, feeling, sensation, and intuition—are also integral components of the music experience.

The key to the music therapy work, which calls itself analytic in orientation, is recognizing that unconscious contents of the music experience and the approach to the music experience must become conscious to the extent that the client can achieve greater self-awareness. In some cases a musically expressive way of relating may be linked to the rest of the behavioral personality and help the client achieve greater personality integration. In "pure" music therapy—therapy where the music experience itself is sufficient to promote behavioral change outside the music room—verbalization regarding the music experience is not necessary. Music therapy in this "pure" sense has been achieved most often with children. With adults, particularly the neurotic, it has usually been necessary for the therapist and client to verbally "process" the musical experience. The client is often guided by the therapist to reflect back and clarify what pertinent dynamics the

musical expression has offered. This process may elucidate other behavioral patterns in the client's life.

As the client is allowed to "work through" his conflicts musically and verbally by being offered, and personally identifying with, an enriching musical experience and a supportive client-therapist relationship, alternative means of approaching and integrating the musical experience into the self become possible. This emotional awareness frequently effects extra-musical change.

### **Music Therapy and Cultural Diversity**

In concluding the argument that affective and cognitive structures are related to musical development and must be clarified in forthcoming years to enhance music therapy expertise, it is necessary to include the subject of cultural diversity with regard to human development and musical expression. It is dangerous to extend any findings beyond the population (in our case, Western) in which they have been established. As musicians, musicologists, and psychologists have demonstrated, the music of one's culture may be influenced by such factors as relationship to religion and art, "vocabulary" (that is, musical mode), and different emphasis (for example, greater emphasis on rhythm in primitive cultures). Lomax, investigating the universal relationships between folk music styles and cultural characteristics of fairly

primitive societies, recognized the relevance of such findings to music therapy practice. For example, the finding that unison instrumental folk music is more common in societies whose political and social interaction patterns are simply organized while counterpoint occurs more frequently in societies characterized by complex, specifically defined and differentiated patterns of political and social interaction, is somewhat analogous to the observation, made frequently by music therapists, that appropriate individual participation in a contrapuntal musical texture is associated with a fairly high degree of individual behavioral organization and social competence. It has also been found that recorded contrapuntal musical textures are responded to by some psychotic patients as though they were social interactions and that patients' acceptance or avoidance of contrapuntal music can provide clinical implications about their tolerance of interactive, interpersonal situations. These and other findings suggest a strong relationship between social structure and group musical performance not only within a given society but within any social subculture.

## **Basic Purpose and Structure of Music Therapy**

The intention of music therapy is to encourage, structure, and develop musical activity that will serve to incorporate the affective, cognitive, communicative, perceptual, and motor needs of the client. The demonstration of enriching change and growth through musical, verbal, and nonverbal

communication and interaction with the therapist is directly related to the extra-musical goals the therapy was intended to meet. In making a referral to a music therapist another clinician (psychiatrist, psychologist, occupational therapist, physical therapist, speech pathologist, special education teacher, social worker, or the like) realizes that successful methods will vary for each individual. The strength of music as a therapeutic tool is that it motivates a client to work toward difficult goals in a personally meaningful, expressive way. According to I Ching:

Music has power to ease tension within the heart and to loosen the grip of obscure emotions. The enthusiasm of the heart expresses itself in a burst of song, in dance and rhythmic movements of the body. From immemorial times, the inspiring effects of the invisible sound that moves all hearts and draws them together has mystified mankind.

As in psychotherapy, music therapy can and does proceed on three levels:

- 1. supportive therapy—strengthening of existing defenses, development of new and better mechanisms to maintain control, and restoration to an adaptive equilibrium;
- insight therapy with re-educative goals —insight into the more conscious conflicts with deliberate efforts at readjustment, goal modification, and living up to existing creative

#### potentialities

3. insight therapy with reconstructive goals—insight into unconscious conflicts with efforts to achieve extensive alterations of character structure and expansion of personality growth with development of new adaptive potentialities.

Due to the tremendous diversity of age (preschool to geriatric) and disability (developmentally disabled, emotionally handicapped, physically impaired, multiply handicapped, substance abusers, criminal offenders), musical activity is structured and developed differently for each client. Depending on the training and orientation of the music therapist, the capacity of the client to be involved in therapy, and the interdisciplinary goals set for that client, the extent to which musical activity is developed to incorporate client needs differs dramatically (see "Specific Applications of Music Therapy"). In those cases where the client will undergo short-term therapy and may be chronically ill and/or highly resistant to therapy, supportive music therapy provides immediate access to the benefits of music (catharsis, self-organization, socialization, time-ordering, mood-setting) without necessitating an investigation of the dynamics of the activity to provide insight and change. Pleasurable activities emphasizing interpersonal relationships, task achievement, and social behavior in groups are common approaches to supportive music therapy.

Many cases of insight therapy with re-educative goals are represented in

the literature of music therapy with handicapped children—particularly those children who are developmentally delayed. Most of these children are in an educational setting in which interdisciplinary team members work toward psychoeducational goals. Re-educative goals for geriatric clients are commonly approached through music. In cases of stroke or deterioration of the brain leading to disabled motor, communication and/or thought processing, music, perceived through the right hemisphere, can be a basis for motivating clients and "teaching" the left hemisphere to be operative again.

Insight therapy with reconstructive goals, the most in-depth treatment, can be brought about with music creating an environment in which a patient can explore intrapsychic phenomena, experience affect, develop mastery, direct himself toward resolution of conflicts, and risk change.

In all cases, music is used because it evokes various moods or affective states and demands reality-oriented behavior to those stimuli—aural, visual, kinesthetic, musical, and verbal—built on the time-ordered necessities of a given musical situation. Through involvement with the musical process, one can develop awareness of affectual states while maintaining the reality of the moment. Music also provides time-ordering, self-organization, and experience in relating to others or to the self.

Since music can be very much a formal art, the capacity for entry level

music involvement will vary tremendously. Many clients may simply have an emotional attachment to music and the desire (whether directly or indirectly expressed) to become more involved. Others will have had previous amateur and/or professional experience and emotional attachment (whether positive, negative, or ambivalent) to their training in voice, an instrument, composition, or the like. In all cases, the capacity of music to influence behavior is clear to the music therapist.

Recognizing the current capacity of the client to become involved in music, and acting to provide support, guidance, and organization, the therapist structures the client's musical experience via listening, improvisation (movement, personalized songs, simple instrumental activity, musical drama), and/or preplanned song, movement, and instrumental activity. As in normal development, the individual's dependency upon the guidance of the therapist should decrease as a repertoire of skills is built up, and the client is able to initiate choices. A feeling of autonomy and self-respect develops as the client identifies with the musical activity, incorporates more and more of himself into it, and increases a sense of mutuality with the therapist or group in the music-making experience.

Other music therapy sessions may involve the gradual intervention of the music therapist in dealing with a client's rigidly bound patterns of relating to an instrument. Assuming the client has a stake in preserving these patterns, the therapist's job is to listen, to help clarify the problem, and to present opportunities for the client to try out alternate ways of relating and musically communicating.

As has been implied all along, the relationship between client and therapist in the music therapy process is of paramount importance. The development of basic trust, dependency, and then the emotional recognition of the autonomy of the two individuals (or members of the group) is essential. In music therapy, transference and countertransference come about through verbal, nonverbal, and musical situations:

The loving feelings of the music therapy positive transference do not have the same frustrating aim-inhibited quality as they do in analysis. To play music together and, even partially, to relieve physical tensions in this way, can be an unconscious symbolic equation for various basic impulses such as feeding, making love or even killing. Music therapy transferences are therefore deep but more manageable, both in their positive and negative aspects, [p. 243]

The amount and nature of verbal "processing" between client and therapist once again depends upon the orientation of the therapy as well as on the training of the therapist. A therapist incorporating re-educative and/or reconstructive goals into therapy will provide as much structure and direction as the client needs and will verbally support and "process" feelings evoked by the music while possibly relating them to extra-musical patterns of behavior.

Music therapy structure depends on the suitability of individual or small group therapy, and necessarily involves assessment of client needs, musical materials based on these needs, and evaluation of client response.

## **Specific Applications of Music Therapy**

#### The Multiply Handicapped Child

Today the profession of music therapy is probably most often associated with handicapped children. These children have many needs in relation to their primary difficulties and secondary delays. All of these developmental delays (social-emotional, cognitive, communicative, motor, perceptual) may be revealed in musical experience and the child-therapist relationship. Common goals include speech initiation and language development, ego organization and personality development, behavior modification, motor control, lengthened attention span, and memory development:

Often a handicapped child lives in a state of continuous tension, and is unable to express his emotions in an orderly fashion. Frequently he is unable to assimilate his life's experiences. He may be confused because he fails to interpret them. He has little or no faith in his own capacities. He feels rejected and he rejects himself. Often he is unable to communicate his needs, unable to control his inner conflict. The results are well-known manifestations of unacceptable behavior. [p. 143]

The music therapist must communicate with the child at the level of the child's developmental capacity for musical experience. In some cases the

therapist may begin this communication with a rhythmic tapping on the soles of the child's feet—"Hel-lo." The child can appreciate this as a basis for further vocal and/or movement feedback to the therapist via differentiated tonal cries and rhythmic movement. Following a reflexive level of vocal and movement response, a child has the capacity to move on to a tonal and/or rhythmic response that bears a relationship to a therapist's musical piano improvisation. The expansion of the child's world is made possible by the therapist musically "joining" the mood of the child as well as by attempting to incorporate the rhythms and tonalities of even primitive behaviors —"stereotypic" rhythmic movements and/or undifferentiated crying. The idea of reinforcing the present mood of the client is based on the age old "Iso principle" that "like acts on like." Clinical music therapy improvisation techniques incorporate the tonal and/or rhythmic behavior of a child as well as predictable music structures by which the child may "join" the therapist. The therapist works for a "sustaining of directed response-impulses setting up musical communication" as a basis for the "music child's" further involvement in individualized and, eventually, group activity. Self-expressive musical confidence, enthusiasm for musical creativity, and free functioning and communication of musical intelligence and skills are demonstrated in more demanding, often highly structured, play songs," or orchestrations for instruments such as drums, resonator bells, and assorted percussive and tonal instruments, such as reed horns, glockenspiels, claves, wood blocks, bird whistles, cymbals, adapted string instruments, autoharps, and zithers, designed for developmental needs. The child able to engage in more abstract musical role-playing is encouraged to do so in musical plays designed for voice and simple rhythmic/tonal instrumentation.

### As in verbal therapy, there is often resistance to transition:

For months he [eight-and-one-half-year-old, severely retarded, nonverbal, psychotic child] responded only by rocking happily to simple, conventionally consonant, rhythmic music—and only to this. Any time the therapist introduced dissonances, added words to her singing, or tried to structure his musical experience by repeating patterns, introducing a song, or the like, he would start to cry with a tone of misery and anger. He showed no interest when his name was sung. Any communication had to be entirely on his conditions. [p. 11]

The exploratory efforts of the therapist to engage the child musically in conjunction with an understanding of the dynamics of the child's personality led to further growth: "But gradually, he began to accept as part of his music a Tyrolean waltz played bi-tonally; this highly dissonant music, which still contained some of his 'old, uncomplicated' music, engaged him and provoked some vocal responses." The ability to sing longer tonal phrases, the subsequent exploration of vowel sounds, and finally holophrastic language allowed this child an opportunity to sing about himself and his environment ("What's That?" "Roll Call Song," "Goodbye Song") while playing with the therapist.

The playing-out of a child's emotions through improvised or precomposed music should lead to the child's eventual control of the musical situation; in this regard the ability to perceive and play a regular beating pattern is a measure of inner control. The twelve categories of rhythmic beating responses observed by Nordoff and Robbins in their more than twenty years of clinical work all have psychological and neurological correlates. One example of this is the compulsive beater: "What a compulsive beat signifies is an enigma. It is almost always associated with children generally described as autistic. Perhaps its most salient characteristic is its apparent meaninglessness; no variety, no mobility, no expression, remoteness. It is unrelated to the environment.

The therapist employs techniques to create a comprehension of the music rather than the ritualistic action of repeated beating:

Gradually the boy [nine-year-old, brain-damaged, aphasoid, autistic] is attracted to two songs sung by the therapists; one is about him and contains his name. His emotional response can initially come no further than facial expression and deeper breathing. His stiff posture relaxes to the warmth of the melodies and harmonies. The songs alternate with rhythmic work, the therapist leading from one to the other as the child's responses indicate. Subjected to syncopation and dissonance in the improvisation his compulsive beat begins to break down. His beating now acquires some meaning and relates to the songs (basic beat, melodic rhythm). Gradually he begins to sing fragments of the songs with the therapists. As he works his way into musical expression through a series of new experiences, he activates parts of his nervous system he has not used before.

The planning and implementation of musical involvement for the handicapped child develops musical skills as a secondary benefit to developing behavioral growth. As already mentioned, composed and improvised music therapy materials are highly personalized in terms of the client's personality and developmental needs. Composed music therapy materials, based on speech and language development, follow the inflections, rhythms, and phrasing of speech, as well as reflecting the array of genuine emotional experiences children undergo. Special motor needs for physically handicapped children, asthmatic children, and developmentally delayed children' are met in music therapy composition and instruments designed. The music therapy profession continues to develop specific programming for such populations as the autistic, hearing-impaired, severely/profoundly handicapped, communication disordered, cerebral palsied learning disabled, and mentally retarded.

#### The Neurotic

With neurotic clients in individual and/or small group therapy (see "Group Work with Emotionally Disturbed Adults"), music therapy goals include awareness of and feelings about one's musical expression, extension and integration of music expression, and spontaneous musicality and interaction. The awareness of inner sensations and freedom to respond to these is essential. In neuroses, the patient is frequently blocked due to

particular or diffuse anxiety. All music therapy goals bear a specific relationship to the client's particular psychopathology, which is, whenever possible, verbally processed between client and therapist. "As the modern analyst resolves the patient's resistances to putting his thoughts and feelings into words (the music therapist can) resolve resistances to putting them into music. This process is begun by learning as much as possible about the client and discovering with him what specific needs exist." An ostensible "music lesson" may really be a continuation of the learning process "with an exploration of the many possibilities within the music and within the person in terms of what he might want to say through his body and his own decoding of the composer's message on the printed page."

Depending on the level of anxiety, warmup relaxation techniques utilizing rhythmic movement, deep breathing, appropriate vocal sounding, and simple melodic piano improvisations may help the client begin the session. By his own selected musical modality and materials the client provides the therapist with a self-portrait of his emotional and cognitive styles/patterns toward music making. These emotional and cognitive styles may reflect on the patient's emotional and cognitive styles outside of the music session. Through the guidance of the music therapist, the client is encouraged to process his feelings about musical experience in relation to self. The client is encouraged to attempt alternate means of dealing with the music situation, as he would with extra-musical situations. Such experiences

may lead to new understanding and possible alternatives in behavior.

Often the highly verbal neurotic will gain more insight from the emotionally-laden music experience than from incessant talking:

The client, preoccupied with conflict about satisfying sexual desires, entered the music room as usual wanting to discuss her problem. Encouraged to sing her chosen selection, Jerome Kern's "Make-Believe" (from "Showboat") she was vocally supported by the therapist. Following the first stanza in which the client sang with strained serious voice, the therapist chose a jazzy harmonically sensual backdrop for the piano accompaniment of the second stanza. Going along with this "sexy" piano accompaniment, the therapist modeled an uninhibited vocal timbre, rather breathy at times and suggestively inflected. The client, vocally supported by the therapist, apparently found the "sexy" style of singing spontaneously contagious and attempted to try it herself. With difficulty she spontaneously shook her arms and hips, snapped her fingers and, when not laughing, "dared" to sing sultry, low-pitched sounds. These were in direct contrast to her usual shrill, strained voice. Her obvious delight in singing was accompanied by embarrassed laughter and a blushing face. She claimed she "didn't like singing this way." When the therapist pointed out her physical reactions in relation to the experience, she began to understand her gut reactions to sexual experience. It was gratifying for her to realize she could express another "more submerged" side of herself safely through the music.

Priestley wrote that "as a reference point for working through the psychic needs and tension—musical forms provide a safe environment and structure for personal expression." Furthermore, the therapist helps the client by "providing a musical container to receive and complement the expression of her painful emotions and makes it safe for her to talk about them and the

memories they evoked afterwards." This "musical container" can be precomposed or spontaneous; it is always shared—either directly or indirectly—by the therapist. It can be a listening experience in guided imagery or a written composition or song offered by the client. In many instances the improvisatory effort between client and therapist results in dramatic casting of ideas or roles.

Among her various techniques of "analytical" improvisation, Priestley suggested: (1) "holding," that is, a means of allowing the client fully to follow an emotional experience through to a climax in order to diminish the fear of disintegration under high emotional stress, thus giving the emotion the chance to be expressed while expending enough bound energy to allow the client to think more and feel less about the subject; and (2) "splitting-useful," that is, where the client has projected part of himself onto another character. Therapist and client take on different roles and then switch musical feelings of "characters" in order to further clarify identities. This technique is also useful in conflict situations where all the energy is being held in maintaining the status quo. After the client describes her feelings about both sides of the conflict in word pictures, the music therapist starts off in the character of one person or idea:

A university student, Eva, wanted to explore with me her unequal relationship experiences. I started by being "Doormat" while she played "Dominant" but she was not concentrating on her own expression but trying to provoke me all the time. She said that she thought that if I did last

out then she would have to be "Doormat." Next I was "Doormat" but I left spaces for her to answer back musically but she never did. Next I made a long decrescendo (gradual lowering of volume) to see when she would dare to reverse roles. At my "pp" (pianissimo—soft level of volume) she was "ppp" (even softer) and then when I reached "ppp" suddenly, right at the end, she did assert herself. Following this, she felt able to resist her tutor's efforts to make her take up work at a "suitable" school whose principles she disbelieved in, and to risk looking for a position in which she would feel happy and honest, [p. 125]

### The Psychotic

With the psychotic in individual or small group therapy, basic goals (as with the neurotic) include awareness of one's musical expression, extension and integration of musical expression, and spontaneous expression and interaction. The need for more structure is necessary to bring the patient into closer touch with external reality. Of paramount value for the psychotic is the formation of an attachment, the expression of self within a structure, and the further channeling and structuring of emotional effort when musical communication becomes established as the ongoing basis for attachment.

Personal integration of emotion and meaning, whether it is apparent to the therapist or not, is often a result of music therapy experience. The schizophrenic patient usually does not express himself verbally, but may manifest the organization of his feelings via the music. Experiencing a moment that is relevant and real, the patient confirms his attachment within an ongoing process; feeling is brought out of chaos into a structure; there is a

### delineation of experience:

Using his musical ear to pick out the notes on the keyboard, Arthur [seventeen-year-old schizophrenic] very much wanted to recreate the musical composition but was defeating himself by mechanically trying to reproduce the melody. Since he had already learned the accompanying chords of the composition while supported melodically by the therapist, he was guided to recognize that the melody was composed of the same notes as the accompanying three-note chord. He joyfully experimented with the concept while the therapist aided him. Given a meaningful structure within which to work, it was easier for him to grasp the melodic meaning of the composition. The rhythm had to be structured and modeled for Arthur by the therapist as well; his ability to organize himself musically is tremendously impaired although he is quite gifted musically.

Cognitive organization is inherent in recognizing and enjoying the structural parts of the music (melody, variations of melody, rhythms in relation to melody, harmonies in relation to melody, and so forth) in and of themselves, as well as in relation to a whole musical composition. One musical idea follows another as the scheme unfolds. The joy in taking apart the puzzle and then putting it back together in a meaningful way helps give the client a feeling of control and mastery.

The recognition of the psychotic client's present capacity to participate in and/or create music is essential. As in visual arts experience, it is suggested that levels of musical participation may correspond to a certain stage of pathology—particularly in the case of the schizophrenic client:

Marie was consistent in her creation of very literal music materials. Harmonies were traditionally consonant and always repetitive in terms of three basic Western chord structures. Melody was confined to a five-note range and repeated twice. Rhythm was 4/4—an easily grasped structure which always corresponded directly to melodic rhythm. She was a conservatory graduate of Juilliard and had received considerable musical training in piano and theory and composition. The usual musical directions of accent, phrasing, dynamics, and tempi markings were completely absent from her composition. Only as she became more trusting of the therapist and more revealing of her emotions in her dearly loved classical music was she able to begin to compose with syncopated rhythms, dissonant harmonies, larger tonal range, and an emotional content related to the title of the music. In addition she spontaneously began to include musical markings and to point out the "new" aspects of her work.

If psychotic patients resort to thought disorder as a means of defense against stress, then their complete disorganization and need for structure in music may "progress" into a defensive, literal, tightly structured musical interpretation as an alternative defense. This hypothesis is supported by the observation that psychotic patients sometimes produce melodies in constricted ranges with even patter rhythms, and that this constriction of range and lack of rhythmic differentiation were found to function defensively. Often, patients whose behavior is over-controlled also speak in pinched, narrow, or nasal tones. Severely restrictive, constrictive behavior usually

indicates much anxiety, and severe constriction of vocal tones in patients may also be indicative of conflict. Association between remission of these musical traits and remission of a psychotic thought process has also been observed.

The awareness that one can confront conflict and grow not only by being one's self but by participating with other selves may be achieved by participation in musical structures. Ain described some of the roles music serves in a group situation. The group as a whole perceives the sound (as do the individuals) and reacts. The need to channel cathartic and play activities is met by acceptable adult expression—instrumentation, songs, verbal expressions, and the association accompanying the musical process and expression. As previously mentioned, these activities and forms provide psychic distance from threatening affect; the manner in which the person expresses himself musically may represent his psychic constellation. The acting out of feelings provides a possible basis for increased reality testing when feelings, expressions, and mastery are overtly expressed within the group: "The musical stimuli can act as a rehabilitative vector in revealing conflicting situations and manifesting catharsis." This structured reality simultaneously creates a means to explore one's affective states in relation to other people. Music is universally capable of arousing affective responses and modifying existing moods in individuals with only minimal musical talent: "Everyone understands music and it is a communication form which no one can withdraw from . . . therefore ... it is a social force which unites people

during therapy." One example of this is the use of rhythm since it provides a "bond for joining people together because rhythm 'persuades' individuals to act with other individuals. Thus we can give in to rhythmic impulses and simultaneously maintain form and control in expression." It has been suggested that imitation and initiation of group rhythmic patterns not only can facilitate and sustain the group's attention span and develop awareness of other members' sounds but also can be the basis for a group rhythmic sound. Likewise, the creation of a group melody to which each member adds his pitch (tone) at a specified or spontaneous time can be a basis for group identification: "Verbal processing is necessary for members to become aware of their affectual and cognitive responses to interpersonal relationships in the group."

The use of singing to unify a group is common in music therapy. Solo, duet, and trio vocalizing are helpful "to develop autonomy and to foster peer support." The nature of the song material as well as the nature of the music experience (listening versus participation) can affect the cohesion of the group. Mitchell and Zanker found that active singing of folk and traditional songs, as opposed to listening to diverse classical music, increased group cohesion during music group therapy. The group members who went from a passive listening experience to active participation by singing these songs, showed further integration of their personalities during group therapy.

Frances and Schiff, encouraging teenagers in group psychotherapy sessions to choose songs and recordings that appealed to them, found that it was "socially acceptable to be moved by the songs . . . [whereas] ... it is less acceptable to share the same feelings openly in a group." During this group process "previously repressed affects became available for cognitive understanding and control." The authors did not cite any differences in growth between active and passive musical experience.

Writing lyrics to original or precomposed compositions "can be an excellent way of members exploring their attitudes related to the group." Rosenbaum recognized that the song may be a way to express transference feelings toward the therapist. The selection of the song can also serve as a "transitional object to gain autonomy within the group or from the leader."

Group improvisation was perceived by Priestley as a means for group psychotherapy. Depending on the members' musical skills, percussion and tonal instrumentation are commonly used to create nonverbal dialogues to explore affectual responses within the group: "Depending upon the group's and members' needs, individual expression is verbally processed." Ain suggested that some members have not set the boundaries to control such qualities as dynamics (loud and soft), tempo (fast and slow), and pitch (high and low) in a socially appropriate way and can explore their control through the use of percussion instruments.

More active and more passive roles in the group are ongoing via musical structures, not only when group sounds are influenced (harmonically, melodically, rhythmically) by members, but also when a direct leadership role, such as conductor, is allocated or elected.

The intent of the group will vary. Ain suggested the creation of a music therapy "work" group by structuring the beginning, middle, and ending of activities. The intent of another kind of group might be to formulate attitudes toward group members and therapist through the dynamics of musical activity. Such a group would be termed by Ain as an "assumption" group. "If a person asks for another to sing a song with him, this could be an indication of pairing in the group. If the patient randomly plays an instrument, this could be a flight from the group's task. If a person is silent, he has the opportunity to actively listen and, in his way, feel a part of the group."

It is apparent that the verbal processing of feelings evoked by musical experience and the clarification of musical behaviors in relation to human dynamics will differ from group to group. Verbal interaction among members of the group and the subsequent relationship between verbal interaction and musical processes need further investigation. Ain studied two groups (each with four members) of developmentally disabled and emotionally disturbed young adults who were exposed to maximally structured and minimally structured music therapy groups for six weeks. He concluded that "inactive

leadership is contraindicated for short-term treatment with this population. The directive approach is more necessary and appropriate during short-term music therapy sessions for groups of emotionally disturbed and developmentally disabled young adults."

It seems the capacity of the group members and/or the leader (therapist) to provide order through sound affects verbal processing. Ain writes:

The leader continues to provide order through sounds and rhythms that have inherent relational patterns. Members unconsciously identify with these structures and feel ordered experiences. From this stance, the group gains courage to verbalize feelings and expression related to their intrapsychic and interpersonal functioning. An example of this process is when Yvonne [age 22, latent type schizophrenic] finishes singing and playing her rhythmic patterns she then expresses she feels less self-hatred and hopes to work in a satisfying job. [p. 104]

The music therapist recognizes that influential components of group process in which music is used as a tool include the musical interrelationship between group members and the therapist as well as the musical intervention and structure of activities by the therapist.

# **Bibliography**

Ain, E. "The Relationship of Musical Structure and Verbal Interaction Process during Adult Music Therapy," (unpublished M.A. thesis, Hahnemann Medical College and Hospital, Philadelphia, Pa., 1978).

- Altschular, I. M. "Four Years' Experience with Music as a Therapeutic Agent at Eloise Hospital," *American Journal of Psychiatry*, 100 (1944): 792-794.
- ---. "The Past, Present and Future of Music Therapy," in Podolsky, E., ed., *Music Therapy*. New York: Philosophical Library, 1954, pp. 24-35.
- Alvin, J. Music Therapy. London: John Baker Publishers, 1966.
- ----, Music for the Handicapped Child. 2nd ed., London: Oxford University Press, 1976.
- ----. Music Therapy for the Autistic Child. New York: Oxford University Press, 1978.
- Apel, W. Harvard Dictionary of Music, 2nd ed., Cambridge: Harvard University Press, 1972.
- Arieti, S. Creativity: The Magic Synthesis. New York: Basic Books, 1976.
- Bailey, P. They Can Make Music. London: Oxford University Press, 1973.
- Bang, C. "Music Therapy and Musical Speech Therapy for Deaf and Multiply Handicapped Children," (unpublished paper, 1978).
- Barnhart, C., ed. The American College Dictionary. New York: Random House, 1953.
- Beatty, K. "Cerebral Dominance in the Processing of Verbal vs. Musical Stimuli," (unpublished paper, Montclair State College, Upper Montclair, N.J., 1979).
- Berel, M., Diller, L., and Orgel, M. "Music as a Facilitator for Visual Motor Sequencing Tasks in Children with Cerebral Palsy," *Developmental Medical Child Neurology*, 13 (1971): 335-342.
- Bershatsky, D. Personal communication, November 1979.
- Bonny, H. L. "Music Therapy—Guided Imagery," in Raslof, L., ed., Holistic Dimensions in Healing: A Resource Guide. New York: Doubleday, 1978.
- ----, and Savary, L. Music and Your Mind. New York: Harper & Row, 1960.

- Bonny, H. L., et al. "Some Effects of Music on Verbal Interaction in Groups," *Journal of Music Therapy*, 2 (1965): 61-63.
- Boxberger, R. "Historical Bases for the Use of Music in Therapy," *Proceedings of the National Association for Music Therapy, Inc.* Lawrence, Kan., 1966, pp. 125-166.
- Bregenzer, D. "Affective Response to Music as Evidenced in Physiological Process," (unpublished paper, Montclair State College, Upper Montclair, N.J., 1978).
- Bright, R. Music in Geriatric Care. New York: St. Martin's Press, 1972.
- Brown, M., and Selinger, M. "A Non-therapeutic Device for Approaching Therapy in an Institutional Setting," *International Journal of Group Psychotherapy*, 19 (1969): 88-95.
- Capurso, A. Music and Your Emotions. New York: Liveright, 1952, pp. 56-82.
- Cass, M. "A Note on Music," in Arieti, S., ed., *Creativity: The Magic Synthesis*. New York: Basic Books, 1976, pp. 236-241.
- Castellano, J. A. "Music Composition in a Music Therapy Program," Journal of Music Therapy, 6 (1969): 12-14.
- Chadwick, D., and Clark, C. *Clinically Adapted Instruments for the Multiply Handicapped.* Westford, Mass.: Modulations, Inc., 1979.
- Chase, M., in Chauklen, H., ed. *Marion Chase: Her Papers.* Washington, D.C.: American Dance Therapy Association, 1975. pp. 25-53.
- Cooke, D. The Language of Music. London: Oxford University Press, 1959.
- Copland, A. *Music and Imagination, The Charles Eliot Norton Lectures.* Cambridge: Harvard University Press, 1952.
- Coriat, F. "Some Aspects of a Psychoanalytic Interpretation of Music," *Psychoanalytic Review*, 32 (1945): 408-418.

- Davies, J. B. The Psychology of Music. Stanford: Stanford University Press, 1978.
- Dobbs, J. P. B. The Slow Learner and Music. London: Oxford University Press, 1966.
- Dreikurs, R. "Psychiatric Concepts of Music Therapy for Children," *Proceedings of the National Association for Music Therapy, Inc.* Lawrence, Kan., 1953, pp. 81-84.
- Eagle, C., ed. *Music Therapy Index*, vol. 1. Lawrence, Kan.: National Association for Music Therapy, 1976.
- ----. Music Psychology Index, vol. 2. Denton, Tex.: Institute for Therapeutics Research, 1978.
- Ewing, S. R. "Piagetean Approach to Music Therapy with the Severely/Profoundly Handicapped Child," Conference of the National Association for Music Therapy, Atlanta, Georgia; November 1979.
- Frances, A., and Schiff, M. "Popular Music as a Catalyst in the Induction of Therapy Groups for Teenagers," *International Journal of Group Psychotherapy*, 26 (1976): 393-398.
- Fromm-Reichmann, F. *Principles of Intensive Psychotherapy.* Chicago: The University of Chicago Press, 1950.
- Galloway, H. "Music and the Speech Handicapped," in Graham, R., ed., *Music for the Exceptional Child.* National Conference of Music Educators. Reston. Va., 1972, pp. 15-48.
- ----. "A Comprehensive Bibliography of Music Referential to Communicative Developmental Processing, Disorders and Remediation," *Journal of Music Therapy*, 12:4 (1975) 164-196.
- Gardner, H. *The Arts and Human Development: A Psychological Study of the Artistic Process.* New York: John Wiley, 1973.
- ----. The Shattered Mind. New York: Vintage Books, 1976.
- ----. Developmental Psychology: An Introduction. Boston: Little, Brown, 1978.

- Gaston, E. T., ed. Music in Therapy. New York: Macmillan, 1968.
- Geschwind, N. "Language and the Brain," Scientific American, April 1972, pp. 76-83.
- Globus, G. G. "Quantification of the REM Sleep Cycle as a Rhythm," *Psychophysiology*, 7:2 (1970): 248-253.
- Goodman, K. D. Unpublished Papers, 1979.
- Graham, R., ed. *Music for the Exceptional Child.* National Conference of Music Educators, Reston, Va.; 1975.
- Hamel, P. M. Through Music to the Self. Boulder, Col.: Shambula Publications, 1978.
- Hannett, F. "The Haunting Lyric: The Personal and Social Significance of American Popular Songs," Psychoanalytic Quarterly, 33 (1964): 226-229.
- Heimlich, E. P. "An Auditory-Motor Percussion Test for Differential Diagnosis of Children with Communication Difficulties," Perceptual and Motor Skills, 40 (1975): 839-845.
- Hurwitz, I., Wolff, P., and Kotas, K. "Nonmusical Effects of the Kodaly Music Curriculum in Primary Grade Children," *Journal of Learning Disabilities*, 8:3 (1975): 167-173.
- Kasloff, L., ed. Holistic Dimensions in Healing. New York: Doubleday, 1978.
- Kestenberg, J. S. "Role of Movement Patterns in Development," Psychological Quarterly, 34 (1965): 1-36.
- Kohut, H., and Levarie, S. "Observations on the Psychological Functions of Music," *Journal of American Psychoanalysis*, 5 (1957): 389-407.
- Kreitler, H., and Kreitler, S. Psychology of the Arts. Durham, N.C.: Duke University Press, 1972.
- Kris. E. Psychoanalytic Explorations in Art. New York: International Universities Press. 1952.
- Langer, S. Philosophy in a New Key. Cambridge: Harvard University Press, 1951.

- ----. Feeling and Form: A Theory of Art. New York: Charles Scribner's Sons, 1950.
- Levin, H. Learning Through Music. Boston: Teaching Resources, Inc., 1975.
- ----. Learning Through Song. Boston: Teaching Resources, Inc., 1977.
- ----. A Garden of Bellflowers. Bryn Mawr, Pa.: Theodore Presser, Inc., 1978.
- ----, and Levin, H. "Instrumental Music—A Great Ally in Promoting Self-Image," *Music Educators Journal*, 58:8 (1972): pp. 31-34.
- Lomax, A. Folk Song Style and Culture. Washington, D.C.: American Association for the Advancement of Science, Publication no. 88, 1968.
- Madsen, C. K., and Madsen, C. H. "Music as a Behavior Modification Technique with a Juvenile Delinquent," *Journal of Music Therapy*, 5:3 (1968): 72-76.
- Mahler, M. Psychological Birth of the Infant. New York: International Universities Press, 1975.
- Maslow, A. H. "Music Education and the Peak Experience," *Music Educators Journal*, 54:6 (1968): 73-75.
- ----. The Farther Beaches of Human Nature. New York: Viking Press, 1972.
- Marks, M. "Musical Wind Instruments in Rehabilitation of Asthmatic Children," *Annals of Allergy*, 33:6 (1974): 313-319.
- Meyer, L. B. *Emotion and Meaning in Music*. Chicago, Ill.: University of Chicago Press, 1956.
- Miller, M. D. "Music and Tension," Psychiatric Review, 54:1 (1967): 141-155.
- Moretti, V. "Music in Special Education," Academic Therapies, (1971): 143-148.
- Mursell, J. The Psychology of Music. New York: W. W. Norton, 1937.
- Nass, M. L. "Some Considerations of a Psychoanalytic Interpretation of Music," Psychoanalytic

#### Quarterly, 40:2 (1971): 303-316.

- Nordoff, P., and Robbins, C. Pif-paf-poultrie. Bryn Mawr, Pa.: Theodore Presser, 1961.
- ----. Playsongs-Book I. Bryn Mawr, Pa.: Theodore Presser, 1962.
- ----. The Three Bears. Bryn Mawr, Pa.: Theodore Presser, 1966.
- ----. Fun for Four Drums. Bryn Mawr, Pa.: Theodore Presser, 1968.
- ----. Playsongs-Book II. Bryn Mawr, Pa.: Theodore Presser, 1968.
- ----. Music Therapy in Special Education. New York: John Day, 1971.
- ----. Therapy in Music for Handicapped Children. New York: St. Martin's Press, 1971.
- ----. Folksongs with Resonator Bells. Bryn Mawr, Pa.: Theodore Presser, 1977.
- ----. Creative Music Therapy. New York: St. Martin's Press, 1978.
- Noy, P. "The Psychodynamic Meaning of Music," Journal of Music Therapy, 3 (1966): 126-134.
- ----. "The Psychodynamic Meaning of Music," *Journal of Music Therapy*, 4 (1967): 7-23, 25-51, 81-94, 117-125.
- Ostwald, P. "Musical Behavior in Early Childhood," *Developmental Medical Child Neurology*, 15 (1973): 367-375.
- Ostwald, P., and Peltzman, P. "The Cry of the Human Infant," *Scientific American*, 230:3 (1974): 84-90.
- Peters, M. L. "A Comparison of the Musical Sensitivity of Mongoloid and Normal Children," *Journal of Music Therapy*, 7 (1970): 113-123.
- Pflederer, M. "The Responses of Children to Musical Tasks Embodying Piaget's Principle of Conservation," *Journal of Research in Music Education*, XLL (1964): 251-268.

- Priestley, M. "Counter-transference in Analytical Music Therapy," *British Journal of Music Therapy*, 9:3 (1978): 2-5.
- ----. "Music, Freud and Recidivism," British Journal of Music Therapy, (Autumn 1977): 10-13.
- ----. Music Therapy in Action. New York: St. Martin's Press, 1975.
- Racker, H. "Contribution to Psychoanalysis of Music," American Imago, 8 (1951): 129-163.
- Reck, D. Music of the Whole Earth. New York: Charles Scribner's Sons, 1977.
- Regelski, T. A. Arts Education and Brain Research. National Conference of Music Educators, Reston, Va., 1978.
- Reid, C. Voice: Psyche and Soma. New York: Joseph Patelson Music House, 1975.
- Robbins, C., and Robbins, C. M. Music with the Deaf: A Resource Manual and Curriculum Guide, forthcoming.
- Rosenbaum, J. B. "Songs of the Transference," American Imago, 20 (1963): 257-269.
- Sears, W. W. "Processes in Music Therapy," in Gaston, E. T., ed., *Music in Therapy*. New York: Macmillan, 1968, pp. 30-47.
- Slaughter, F. "Clinical Practices: Approaches to the Use of Music Therapy," in Gaston, E. T., ed., Music in Therapy. New York: Macmillan, 1968, pp. 238-244.
- Soibelman, D. *Therapeutic and Industrial Uses of Music.* New York: Columbia University Press, 1948.
- Sparks, R., and Holland, A. "Method: Melodic Intonation Therapy for Aphasia," *Journal of Speech and Hearing Disorders*, XLI (1976): 287-297.
- Spiro, H. R. "The Role of Music in Mental Health Treatment Programs," Address to the Conference of the National Association of Music Therapy, Milwaukee, Wisconsin, September 1977.

- Stein, J. "Crazy Music: Theory," Psychotherapy, 8 (1971): 137-145.
- ----. "Musicology for Music Therapists: The Lomax Study" *Journal of Music Therapy*, 10 (1973): 46-51.
- ----, and Euper, J. "Advances in Music Therapy," in Masserman, J., ed., *Current Psychiatric Therapies*. New York: Grune & Stratton, 1974, pp. 107-113.
- Steiner, R. Eurhythmies as Visible Music. London: Rudolf Steiner Press, 1977.
- Sterba, R. "Toward the Problem of the Musical Process," Psychoanalytic Review, 33 (1946): 37-43.
- Stevenson, I. "The Psychiatric Interview," in Arieti, S., ed., *American Handbook of Psychiatry*, vol. 1. New York: Basic Books, 1959, pp. 197 ff.
- Sullivan, H. S. "The Onset of Schizophrenia," American Journal of Psychiatry, 84 (1927-28): 105.
  Reprinted in Sullivan, H. S., Schizophrenia as a Human Process. New York: W. W. Norton, 1962.
- Taylor, D. B. "Subject Responses to Pre-categorized Stimulative and Sedative Music," *Journal of Music Therapy*, 10 (1973): 86-94.
- Tyson, F. "Therapeutic Elements in Out-Patient Music Therapy," *The Psychiatric Quarterly*, 39 (1965): 1-13.
- ----. "Music Therapy Practice in the Community: Three Case Studies," *Psychoanalytic Quarterly Supplement*, part 1 (1966): 1-20.
- ----. "Music Therapy Expands to Include Outpatients in Private Practice," *Roche Report: Frontiers of Psychiatry*, 1:1 (1971): 1-2.
- Viscott, D. S. "A Musical Idiot Savant— Psychodynamic Study and Some Speculations of the Creative Process," *Psychiatry*, 33:4 (1970) 494-515.
- Wheeler, B. Verbal communication, November 1979.

- Wolberg, L. R. The Technique of Psychotherapy. New York: Grune & Stratton, 1954.
- Wolff, P. "The Natural History of Crying and Other Vocalizations in Early Infancy," in Foss, B. M., ed., *Determinants of Infant Behavior*. London: Methuen, 1968, pp. 81-109.
- ----. "Role of Biological Rhythms in Early Psychological Development," in Chess, S., and Thomas, A. eds., *Annual Progress in Child Psychiatry and Child Development.* New York: Brunner/Mazel, 1968, pp. 1-21.
- ----. "The Serial Organization of Sucking in the Young Infant," *Pediatrics*, 42:61 (December, 1968): 943-956.
- ----. "Sucking Patterns of Infant Mammals," Brain Behavior, 6 (1968): 354-367.
- Yates, S. "Some Aspects of Time Difficulties and Their Relation to Music," *International Journal of Psychoanalysis*, 16 (1935): 341-354.