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The progressive development of the use of music in medicine, through:

— Advancement of research

— Distribution of helpful information

— Establishment of qualifications and standards of training for therapists

— Perfection of techniques of music programming which aid medical treatment most effectively
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PRESIDENT'S ADDRESS
MUSIC THERAPY IN TROUBLED TIMES

DONALD E. MICHEL

The title of this address was chosen not with morbid or pessimistic thoughts of the "troubled times" in which music therapy found itself, but rather for the reason that it was a flexible kind of title. It is one which applies not only to the "troubled times" of our day, but also to those "troubled times" in which patients find themselves and in which we try to help. In a way it is a challenging title, and it is one which probably could have been applied to almost all of the presidential addresses given to this Association over the past eleven years by each of my predecessors.

The presidential addresses to NAMT in the past provide a kind of perspective at this moment from which we may view NAMT and its growth since its founding in 1950. Ester Goetz Gilliland, our second president, and the first to give a presidential address which is recorded in our Yearbooks, presented a message to the Association in the form of a Preface to the 1951 Book of Proceedings which she edited. (Ray Green, our first president, communicated with us through the Hospital Newsletter, the predecessor of our Bulletin.) Mrs. Gilliland's Preface quite thoroughly summarized the then existing status of music therapy. She accurately foresaw the potentialities of our field and the developments of later years as she wove into a hopeful bolt of whole cloth all of the threads of the many and divergent thoughts and theories of music therapy at that time. In her outgoing presidential address in 1952, she spoke of the founding of our NAMT and of its "... Future Possibilities." She related the widespread interest in music therapy shown by many national groups—musical, therapeutic, and volunteer—and stated that plans were being made to conduct a status survey of the field (which was to become the NAMT survey of 1954–55, "Uses of Music in Institutions"). She announced our plans for setting up minimum standards of training for music therapists and expressed our hope for influencing better salaries and cooperation of music therapy programs with other, older adjunctive therapies in hospitals and institutions.

E. Thayer Gaston in 1953 described some of the troubles which music therapy as a profession was having then, especially in becoming a profession in its own right—one which desired re-
spectable status and recognition with the medical profession and with the older adjunctive therapies. He, too, pointed out the necessity for adequate salaries for music therapists, whose training paralleled that of public school music teachers but whose salaries did not always match those of teachers. Gaston counseled that our solutions lay in the general direction of developing inner strength within NAMT. Part of this would require a cooperative attitude in working out with each other our differences, especially in the adoption of training and procedural standards.

Myrtle Fish Thompson in 1954 referred to the struggle being made toward some of the goals we had set for ourselves in NAMT, such as the standardized minimum training, and she asked, "Is it worth it?" Emphatically she answered in the affirmative, reminding us that our real concern was for the patients and their needs, and pointing out that we had a real opportunity to serve these patients. She expressed the opinion that we were well "on our way" and that we should continue to work toward consolidating our inner forces because it was "worthwhile."

Arthur Flagler Fultz, our fourth president (1954–56), found both strengths and weaknesses within NAMT as he reviewed our progress and status in each of his two years in office. Our past developments by this time included the adoption of minimum educational standards—an element of our growing strength—but he called attention to the need for developing new perceptual structures and concepts of music therapy which could be "anchorages" for further growth of the profession. He advised us to continue to stress research as a means for doing this and for acquiring procedural and theoretical standards.

Roy Undersood's address in 1957 was a sort of epitome of economical expression. He stated that NAMT still needed money, members, prestige, recognition, and many other things, but that it was up to us—collectively and individually—to work for these things, not just wait for them. He seemed to be advising us to put aside any excessive self-concern and to get to work toward accomplishing our goals without further delay.

Serving the first of our new two-year terms as president, Dorothy Brin Crocker in her addresses of 1958 and 1959 directed our attention to the "functional flexibility" of our NAMT membership and urged us to use this asset to continue our already effective efforts in growth. She stated that the challenges of our field
were those elusive qualities of music which have therapeutic potential as well as in the scientific discoveries of research. She urged us to go beyond scientific investigation in utilizing the intuitive, creative aspects of ourselves and our musical tools in therapy.

In the first address of this writer (1960) the growth of music therapy as a profession since World World II was seen as being in some ways analogous to the treatment process and progress of a patient. Several landmarks of “treatment progress” for the “patient,” Music Therapy, were recounted, the latest being the adoption of national registration standards (formulated by the NAMT—the “therapist”) for music therapists, based on training and experience requirements. The “patient” was seen as definitely in the process of getting well, with troubles still ahead but with many important ones already behind.

What might be added to all that has been said in these past presidential addresses? It has been said that we must cooperate, give and take, and work together; that we must base our work more and more on research foundations but at the same time we must not forget the “art” of therapy; we must not lose heart in what we are doing but remember that our basic motivation is in serving the patient; we must assess the past realistically to see and correct our mistakes, then we must set to work rigorously to accomplish our goals. Is not all this advice just as good and just as applicable today as it was when it was given in past presidential addresses? Of course it is! All that really remains for the present is to attempt to bring things up to date in terms of our 1961 problems, and to cite some of our more recent accomplishments. Perhaps then it will be appropriate to try to foresee some of the challenges of the future.

As in past years our first job in looking at present problems is to remind ourselves that probably most of them begin at home. While most certainly “outside” problems face us, we may well look inside NAMT to face our internal problems. Within NAMT during the past year we have had our share of physical problems with several of our key leaders suffering serious illnesses. This meant we had to find and depend upon new and sometimes untried members to furnish necessary leadership and carry out important tasks. Fortunately, we have been able to find excellent leadership to help solve this particular problem. This should be
a note of encouragement to all of us, that within our organization we do have potentially strong leadership, but the problem of finding and identifying such potential leadership in NAMT should be noted.

A major problem within the Association which reflects our basic growth in size and function has been the increasing pressures of time and demands placed upon a few of the key officers and committee chairmen. The proposed central office for NAMT which has been made financially possible by your acceptance of a higher dues rate is a large step in the right direction for solving this problem, but there must be time and patience for the working out of the many problems which have rapidly accumulated over recent years.

What may we list as some of the other “internal” problems of music therapy as we find them within NAMT? In 1960 NAMT reported to the American Medical Association through our liaison person, E. Thayer Gaston, in response to a questionnaire sent out by the AMA to all members of the allied health professions, the following problems:

1. We need more research and we need help with it.
2. We need an executive secretary.
3. We need to increase frequency and extent of publishing our Bulletin.
4. We need to find ways of recruiting young people into the field.
5. We need more coordination between various state civil service programs concerning music therapists.
6. We need wider acceptance and understanding from the medical profession.
7. We need to have more coordination with other allied health professions.

At the same time we could report some major accomplishments such as adoption of and carrying out, registration procedures for qualified music therapists, and the giving of assistance (through our certification-registration committee) to hospitals who wished to set up clinical training programs which could be affiliated with approved schools offering music therapy degrees. But many of these 1960 problems continued over into 1961. In addition, problems of revising and constantly improving educational and registration standards, even at such an early date following their
adoption, face us within NAMT. We need not only to find ways of influencing that “better coordination between various state civil service programs concerning music therapists,” referred to above, but also to discover how we may convince federal civil service officials that music therapists deserve and must have equal status and remuneration with other therapists in Veterans Administration Hospitals and other federal institutions, and that we will never be satisfied with organizational structures which place music therapists under administrative supervision of persons or professions who have not achieved the same or better training. (It seems fairly obvious that these problems represent needs for better professional and public relations.)

Lest we become too morose in considering our own internal problems (and it is recognized that the last two mentioned above might be considered to have strong external facets to them), let us consider some of the major problems “outside” NAMT. Some of these problems may stem from much broader conditions and attitudes than the rehabilitation-therapy field itself. For example, the United States now is acknowledged as a world leader in music therapy, as it most certainly must be in all fields of therapy, and it is probably the leader because we are one of the most affluent countries in the world, having one of the highest living standards ever known. Even without such prosperity we probably would provide leadership out of our basic American philosophy of humanitarianism, but it must be recognized that this strength of our nation in affluence and in philosophy is basic to even the existence of our field. At the same time other qualities of American life may have its inhibiting effects upon our field. For one thing, with an economy geared in large part to defense efforts there are great pressures and demands for scientifically trained technicians and engineers, and this is bound to conflict with efforts to recruit the high calibre young persons needed for rehabilitation fields, including music therapy. Another factor reflecting our present society is concomitant with the strong emphasis upon the science profession, and this is the tendency to regard certain things as unnecessary “frills” and to place more emphasis upon materialistic, physical solutions such as buildings and more buildings to our rehabilitation problems than upon the trained persons so necessary to adequate therapy and rehabilitation.

Another external factor, probably influenced in large measure
by the society in which we live today, is the general attitude of
the "lay public" toward music and the arts in general. Ours is
a world of increasing sound, not the least of which is that of
"canned" music blaring from almost every source from bank to
supermarket. Music in the air has become so common as to influ-
ence many people to take it for granted, and not to pay much
attention to it. Thus when "music therapy" is mentioned it is
likely very often to draw a blank look from most laymen. How
can such an incidental thing as music be a therapy, they ask. To
those of us who have studied music and know how completely
engrossing and absorbing it can be as an activity, this question
of music being such an incidental thing is a real paradox! (It may
even be noted by music therapists that this very quality of de-
mand for complete attention to the music and its production can
be a real problem in its use in therapy, where the reactions of
the patient, not the production of music is paramount.) Never-
theless, we must face this external problem of casualness of much
of the public toward music in general as one which has its re-
flection upon our own profession. It implies again the need for
better communication, better public relations. There may be
other implications which might challenge the researchers in music
therapy as to how such public attitudes arise and what can be
done to change them.

A final problem, which is neither altogether external nor in-
ternal to NAMT, is that of the uniqueness of training demanded
of the music therapist. To find persons who can specialize liter-
ally in two different fields—music and therapy—without becom-
ing schizophrenic, is no small problem! Seriously, this basically
is a problem of recruitment, which has been mentioned previously,
but it also involves a concept which needs further study—that of
just what kind of person is needed in music therapy, and what
kind of training should be given, other than that which is now in-
cluded in the approved pattern.

It is always good to end any address on an optimistic note, if
possible, and since it is possible, this will be the case for this
address. Despite the many problems of internal and external
nature facing us in our struggle for progress and growth, we can
pause briefly to reflect upon our 1960–61 accomplishments—if
only to give us heart as we move on with our struggle. These
accomplishments are not those of any one person, but reflect
much team effort and in the end, the support of all of you who are members of NAMT. So as not to allow ourselves to become too inflated about them, they will be summarized as follows:

1. Adoption of a higher dues rate by the NAMT membership has made possible the continuation of publication of our Yearbook and its distribution among all active members; the increase in frequency of publication of our Bulletin to four times per year; and the setting up of a central coordinating office for NAMT.

2. Improvement of our public relations program can be observed in the continuously increasing distribution of our present NAMT leaflets and their distribution by other national groups such as the National Association for Mental Health and Science Research Associates. Some work has been accomplished on revising our public relations materials and devising new ones.

3. Our first Civil Service survey of state systems with regard to music therapy positions has been completed and promulgated to all cooperating states. This we hope will have some long-range influence upon better and more uniform ratings for music therapists.

4. Our NAMT research program has continued to move ahead with the beginning of some donated grant support. This support, while yet very small, is nevertheless a step in the right direction and may be exemplified in the project now under Dr. William Sears' direction, which is the abstracting of all pertinent research articles for ultimate publication and distribution to all NAMT members. Another small project under the direction of a special committee has resulted in the surveying of NAMT membership to determine its general scope, nature, and potential. This is hoped to be the initial phase of a larger, coordinated national project under NAMT sponsorship.

These accomplishments tell only a small part of the NAMT story of progress and growth over the past year. For instance, a greater recognition and acceptance of music therapy by the medical profession in many places can be viewed with considerable optimism. It seems we are no longer told that we should be doing more research and establishing our precepts and concepts of operation. We seem more often to be accepted as a part of the medical, the "allied health" team. While obviously we are still "on our way," as Myrtle Thompson said in 1954, we have made a lot of progress, and we still have a long way to go.
What of the future? Can anyone foresee it? Probably not. But trends may be indicated, and certainly hopes and goals may be expressed. It is not too early to look for some of the things Gaston predicted for our second decade as he spoke to us last year in San Francisco. For one thing, our membership continues to increase—slowly, but qualitatively as well as quantitatively.

As for hopes, dreams, and goals, might we wish for music therapy to become increasingly more vital and meaningful to more and more people in the world as a whole? Might we dream of music becoming more useful and influential in the daily lives of our people? In my opinion, we should dream and continue to hope for these things in our profession. We should even dream of the influence of music therapy upon *music*—and upon peoples’ attitudes toward it! But while we dream let us never forget the basic goals at hand, which revolve around providing treatment for the patient in his own “troubled world.” And let us never forget that we must continue to *work*, not *wait*, for solutions to our problems—which are also those of NAMT and of “Music Therapy in a Troubled World!”
ANNUAL BANQUET ADDRESS
THE UNIVERSAL LANGUAGE OF MUSIC

CARROLL D. KEARNS

Mr. President, members of the Association, and distinguished guests: it is indeed a pleasure to be with you on the occasion of your Twelfth Annual Conference and to have this chance to commend you for the excellent work you have accomplished in the field of music therapy; work which, as a member of your advisory board, I have watched with special interest and admiration. I am also pleased to have this opportunity to give you some of my observations on the values of music—as a language, as a tool of therapeutic technique, and as a vital part of our national life.

Music is a special kind of language which enables people to communicate in a particular way. Transcending the need for words, which are abstractions, music speaks directly to the emotions; and in this sense music is a universal language. Probably more than any of the other performing and creative arts, music can hurdle the barriers which separate a person from other people or from himself, as well as those barriers which separate nation from nation—and in this ability of music to communicate directly lies its importance and vitality.

As life has become increasingly complex, communication has become correspondingly more difficult. There are few people today who would deny that the world is sorely in need of better communication—at all levels—between governments, peoples, and individuals. Although different languages may use the same word to convey entirely different meanings, thereby often giving rise to confusion, the directness of musical speech insures a high measure of comprehension. For instance, though we may disagree with the Russian use of the word “democratic” on the political level, and find ourselves at an impasse in the exchange of ideas, we can still appreciate a performance by the violinist David Oistrakh. And though they may not be able to reach agreement with us at the conference table, they demonstrate an understanding of the performing language of Van Cliburn by presenting him with the Tschaikowsky Award.

The complexity of life today has not only intensified the problem of communication between us and other nations, it has also intensified the problem of communication among ourselves. This
development may account in part for the startling increase in mental illness in the United States in this century. The National Committee Against Mental Illness reports that there are at present an estimated 17,000,000 people in the United States who are suffering from some form of mental illness.¹ This makes mental illness one of the most significant health problems now facing this country. More than fifty percent of the mentally ill suffer from varying forms of schizophrenia, alcoholism, psychoses, personality disorders and psychoneurotic reactions²—all of which reflect in one way or another a breakdown in communication, either within the mind of the patient himself or in his relations with society.

The healing power of music has been recognized for centuries, but only in the last thirty years or so has it been scientifically employed as a therapeutic technique in mental hospitals.³ More recently still it has been applied in dentistry, in the treatment of the physically handicapped and the socially maladjusted.⁴ The fact that music therapy has proven so successful in all of these diverse areas of treatment further underlines its communicative quality—its great ability to penetrate beyond the reach of words.

In the treatment of patients today many hospitals are using music in some capacity—either as recreational activity or in specific therapeutic programs. The Veterans Administration Day Treatment Center in the District of Columbia provided a pilot study for other Veterans Administration Centers from February 1960 to February 1961 when it introduced music as an integral part of its program. The Center serves the patient as a sort of "half-way house" between the hospital and the community—a place where he can relax and enjoy a variety of activities which include listening to and performing music, as well as group singing and social dancing. Through the effects of this program many patients have been helped to become functioning and responsive members of society, and the success of the music program at the

2. Ibid., 5.
VA Center in Washington shows that similar programs can be adopted by other VA Centers in the country.⁵

The music therapy program at St. Elizabeth's Hospital in Washington has been in operation for five years. The program is used as an adjunct to other therapeutic techniques, and is employed for individuals as well as groups. Music is not therapeutic in the sense that it alone can bring about a cure; but by the effect it has in creating a mood and in directing behavior, it can enable a patient to respond more fully to other phases of the therapeutic schedule. The programs at both the VA Day Treatment Center and at St. Elizabeth's are coordinated with other physiological and psychological treatments and have demonstrated their effectiveness.⁶

Music has already shown its value in medicine and in education and there are now indications that it may be successfully used in other areas. I have been very interested to read about a series of botanical experiments being carried out in South India at Annamalai University by Dr. T. C. N. Singh, Head of the Department of Botany. Since 1950 he has been conducting experiments in the responses of plants to sound—with amazing results. Under identical and strictly controlled conditions, the growth of two groups of plants has been observed. One group is exposed to music; the other is not. Differences in the rate of growth between the two control groups have been measured, and those plants which have been “treated” with music have shown a much faster growth than those left untreated. Dr. Singh's theory explaining this difference is that the sound waves from the musical instruments strike the cells of the plant and stimulate them into accelerated growth. In carrying out these experiments Dr. Singh used a variety of tone-producers including tuning forks, electric bells and electric motors, but is interesting to note that he found the most effective sounds were the high-pitched tones of the violin, the flute, and the human voice.⁷

Similar botanical experiments—in Ontario, Canada, where

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5. Information obtained by telephone from Mr. Kehoe, Assistant Director, Music Therapy Program, Veteran's Administration Day Treatment Center, Washington, D.C.
6. Information obtained by telephone from Mr. Gibbons, Director, Music Therapy Program, St. Elizabeth’s Hospital, Washington, D.C.
wheat was treated to Bach sonatas, and in Wauwatosa, Wisconsin, where greenhouse flowers were treated to recorded background music—have also produced accelerated plant growth. Other sound-response experiments in India with economically important crops such as rice, sugar cane, and tobacco are opening new areas of investigation. The unusual results of these musical experiments, though still limited to a small scale, show promise enough to warrant further research.

Certainly there are philosophical and psychological theories which corroborate these scientific experiments with plants. That there is an interrelation of all the human senses is not a new idea; that there further is a response to sound by forms of life having no auditory sense has now been demonstrated. These botanical experiments indicate that music may be even more of a universal language than we have heretofore supposed.

Anyone who has carefully considered the accomplishments of music therapists resulting from their concern for human welfare will be aware of the possibilities for future development in this profession. Today we recognize that man cannot be compartmentalized: that his emotional, physical, and intellectual natures are so intricately related that we cannot draw a line between them. The concept of therapy, therefore, should not be limited to any one aspect of an individual, but should be expanded to include all those things which help him fully realize his potentialities. In this broader sense, therapy, as Mynatt Breidenthal has so aptly stated, is anything which will “increase and strengthen the individual’s total resources.” And, using this definition, education itself is therapy.

8. Ibid., 53–56.
9. Ibid., 53–56.
10. Charles Hartshorne. The Philosophy and Psychology of Sensation. Chicago: The Univ. Chicago Press, 1934. (Dr. Hartshorne’s “Doctrine of the Affective Continuum” maintains that the type of relation existing between colors, whereby one is connected with or shades into another through intermediaries, can be generalized so as to connect qualities from different senses [e.g., a color and a sound]. In terms of this doctrine, there would be nothing strange about a plant having a sensory reaction to sound as well as to light.)
Realism demands from true patriots as much concern for the spiritual welfare of this nation as for its physical welfare. All the health insurance and physical fitness programs we can devise will serve little purpose if we forfeit our heritage within Western Civilization and fail to provide our people with the opportunity for participating in and adding to the flow of significant creative activity. We must insure the continuation of the great dialogue about Values without which Man cannot determine his role in the Universe. I say "dialogue" because each philosopher or artist—and I use these designations in the broad sense—"listens" to what the world has to tell him and then answers with his creation of a new symphony or painting or expression of philosophical insight. And each of us, who may be only an observer, or an appreciator, of these creations carries on his own dialogue with the artist or philosopher—accepting, rejecting, defining his own rational and aesthetic positions. Without this constant stimulation and enrichment of our inner selves, we can never give shape to our thoughts or demonstrate why we find our way of life preferable to any other. I can see no reason whatsoever for America to accept second-class citizenship in Western Civilization. We are now its political leaders, and we should be its cultural leaders as well.

Now, what role can the Federal Government take in seeing that this leadership will indeed be ours?

That the Federal Government should concern itself with the education and the cultural welfare of its citizens as well as with their economic and social well-being is only proper. That it should be concerned with strengthening its citizens' total resources is evidence of its responsibility. And the first step toward strengthening these resources is the provision of the opportunity for development.

From the pressure of the current emphasis on weapons and technology, there is a danger that we will neglect the opportunities for cultural development—development which shrinks or expands in direct relation to the emphasis we place on the performing and creative arts. The stimulating and therapeutic influences exerted by the arts are basic to the development of all our abilities; without providing for their continued influence in our society, we run the risk of stunting our own national growth.

For a long time I have been concerned about the place of the arts in our society. As a means of communication with the past,
as a link with the future, and as a positive expression of the richness and variety of our way of life, the arts are vital to us. The history of our nation clearly shows the concern of individuals for the development of the arts, but at the same time it shows a lack of public support for a Government program in the arts. The idea of defining a role for the Federal Government in the arts is not new, however. For over a hundred years attempts have been made to establish some kind of Federal support for the arts—attempts which range all the way from the appointment of an Art Commission in 1858, under President James Buchanan, to the short-lived work-relief program for artists during the depression of the 1930's.

In 1955, however, President Eisenhower gave fresh impetus to the drive for a Government program encouraging the arts when he recommended the establishment of a Federal Advisory Commission whose purpose would be "to give official recognition to the importance of the arts and other cultural activities . . . and to advise the Federal Government on ways to encourage artistic endeavor and appreciation." 12

Now, for the first time in our history there is evidence of a definite public concern for the future of the arts, which is reflected in an increased public receptivity to the idea of Federal patronage. It would be a mistake to take this as an indication of a lack of private initiative; it should rather be attributed to the broadened conception of the role of Government—a role which includes a concern for our cultural welfare as well as for our economic and social well-being. Though we have never suffered from the lack of individual initiative in the arts, there is now a need for a stimulus to encourage greater local and state activity so that cultural benefits will be available to those in our smallest towns as well as in our greatest cities.

I am personally convinced that this stimulus could best be supplied in two ways: by establishing a Federal Advisory Council on the Arts to assist in their growth and development, and by providing grants to the States for the development of programs and projects in the arts on a local level. To this end I have sponsored two bills in the 87th Congress: H. R. 413 and H. R. 1942. I have sponsored such legislation in the past, and I will continue to sponsor such legislation in the future because I think it is essential

to the national interest. If public opinion can only be marshalled in sufficient strength, I am certain that the proposed legislation will be approved.

Maintaining the freedom of the arts is basic to any program of Government support. On this point there is agreement among Republicans and Democrats alike. The Federal Advisory Council on the Arts would be composed of 21 members appointed by the President, each member an expert in his field, and the represented arts would include music, painting, the dance, drama, graphic and craft arts, literature, motion pictures, architecture and allied arts, photography, sculpture and radio-television. The main purpose of the Council would be to coordinate private and governmental activities in the arts; to recommend ways to increase the nation’s cultural resources; to suggest ways of encouraging private initiative in the arts; and to work towards stimulating greater public appreciation of the arts.

As its name suggests, the main function of the Council would be an advisory one. There is no proposal for large-scale Federal employment of artists, nor is there any suggestion of Government subsidy of the arts. But it is obvious that there is a need not only for direction and coordination of efforts in the arts, there is also a need for financial stimulation; and in these two respects the proposed Federal Council will be invaluable to the further development of the arts.

In considering the most effective way to stimulate the arts on the local and state level, I have proposed H. R. 1942, the six main provisions of which are: (1) to assist the States to inventory existing programs and develop new ones; (2) to assist in the construction of cultural centers; (3) to protect and preserve historic sites, buildings, or objects of historical, architectural or artistic significance; (4) to train leaders; (5) to assist symphony orchestras, art galleries, and educational institutions, including colleges and universities, to develop and maintain cultural programs; and (6) to provide Federal financial assistance up to $100,000 per State for these purposes.

As one of the leading Nations in the world today we have a great responsibility not only to maintain and improve our leadership, but, beyond that we have the greater responsibility of increasing the opportunities for the cultural development of our own people. The two in fact work together—by providing op-
portunities for developing our national cultural resources, we are further increasing our ability to lead the world.

It is a source of distress to me to realize that the United States is the only major country in the world whose government does not provide some sort of financial assistance to the arts. The historical indifference of our government in this area must not be allowed to continue; the best interests of the nation and of the world demand more of us than we are presently giving.

In closing, let me say that the profession of music therapy has performed a real service to those who have championed a Federal program for the arts—by demonstrating yet another kind of profit to be realized from their advancement. Your accomplishments in the fields of medicine and education, your successes in helping the mentally ill and retarded—as well as the normal and the gifted—are testimony, of a special kind, to the value of the arts to our national life. They are a demonstration of the far-reaching beneficial influences—even in ways not usually considered—of an appreciation for the power of Man's really creative products.

By introducing music into the lives of those with whom you work, you are not only promoting a cure for their illness but you are insuring their success to a permanent source of greater personal satisfaction and enrichment. As music therapists you can temper disability; as music educators you can promote the birth and growth of abilities and capacities which might otherwise lie dormant.

As you further a knowledge and an appreciation of music, you are encouraging an interest in all the arts and promoting, in those you treat, a communication otherwise impossible with a greater and richer world.

It is my hope that the time will come when—through the combined efforts and concern of government, private institutions, and private enterprises—the opportunity to learn the universal language of music, in its more complex as well as in its simpler forms, will be open to all our citizens. The fruits of communicating in this language are manifold.
PART I
CURRENT VIEWPOINTS IN MUSIC THERAPY
MUSIC AS AN AID IN PSYCHOTHERAPY*

ANDREW G. PIKLER

THE MUSICAL MESSAGE

Acoustic Stimulus to Musical Meaning

Before directly attacking the question on how music can be of value in a therapeutic program, it is well to indicate the numerous neurological and physiological events involved in musical listening.

The source of the musical message is the composer, or, in the case of folklore, human society. Transfer of the real content of music implies human and technological relay channels (performers, music instruments, radio, phonograph, etc.), and of course finally a human listener. Perception is relayed in successive steps. The acoustic message (note, not the musical message) traverses the middle ear and is transduced to an electro-anatomical pattern in the cochlea. This electrical pattern is received by the auditory nerve and, probably in accordance with the principles of optimal information transfer (McCulloch, Von Neumann, Wiener), is encoded in time series, represented by the ensemble of neural firings. After traversing a network of pathways and nuclei, the running time series is decoded and classified as the running power spectrum of the acoustical wave input.¹ The cortex furnishes the "readout" of this decoding in the form of conscious activity (musical hearing), and furnishes information concerning musical intervals, chords, timbres, and the temporal and dynamic dimension of music. There may occur short tonal retention and musical memory, perhaps by an actual recording of the message.² Activity, probably subcortical,³ carries

affective-emotional responses to music. In addition, semantic responses are generated in an unknown manner probably in the cortex, accounting for associations with music. Finally, psychosomatic responses occur in various parts of the body.

According to the foregoing, the "content" of music is by no means inherent in the acoustical wave. The acoustical source is initiated by a human performer; the receiver's responses are generated (encoded, decoded, read out, felt, associated) in the various relay centers of the nervous system. Response to music is a complex effect, particularly tied to the human species. Fortunately, there are numerous marked consistencies associated with the transfer processes in the human. This stability makes possible an Objective Music Psychology and also furnishes a basis for the psychotherapist in his therapeutic use of music.

Affective and Associative Responses

There is a striking consistency among normal persons in the recognition and also, as a rule, in the acceptance of moods (happiness, sadness, calmness, excitement, relief from tension, etc.) conveyed by music. Attempts have been made by experimental psychologists to correlate these reactions, which are usually called the affective responses to music, with the attributes of musical contexts.

Affective responses depend primarily on the melodic line and its components, namely the musical key, timing, rhythm, tempo, the dynamic range, harmonization, modulation, orchestration, and the performance itself. The writer (possessing absolute pitch) wishes to support, on the basis of his own experiences, the affective aspects of the absolute keys (e.g., C Major vs. E flat Major). The above correlations are intuitively known by musicians and are exploited, at the creative level, by the composers. By varying just one basic component of a musical context (e.g., changing only harmonization or instrumentation), the affective responses change.

The normal listeners' responses are quite characteristic in the specific dimensions of the produced affects. Lists of adjec-

tives (which are regrouped by some psychologists in the form of Adjective Circles or tabulated in other reference frames) can best reflect the variety of affective responses elicited by music. The following expressions are informative examples: pleasant, exciting, lovely, light, grave, tender; unpleasant, irritating, painful; serene, calm, etc. There is hardly a basic type of mood which cannot be elicited by music in the neutral but reactive person, nor an emotional situation (anger, hatred, resentfulness, jealously, love, tenderness, anxiety, impatience, homesickness, etc.) which could not be affected (accentuated or inhibited) by interaction with music. Listening to music can add to our joy, also tame elation. Within the utmost extremes of our affective scale ("Himmelhoch jauchzend, zum Tode betrübt," "Rejoicing sky-high, afflicted to death"—Goethe), music can follow and influence our emotional states; it can change our mood to its opposite extreme, in gradual steps, or even subito, i.e., without any transition.

To be distinguished from the affective responses (which are thought of as mood recognitions and universally valid for normal listeners), are the personal preference ratings. The latter, depending essentially on the listeners' personality traits and their momentary moods, are subject to large inter- and intrapersonal variances. Besides the affective responses, the music psychologist is also committed to assess these personal preferences, which, on the other hand, involve the scale-categories of "like," "dislike," or "indifferent."

Similar to the preference ratings, our semantic-associative responses (kinaesthetic and tactile sensations, pictorial imagery, associations with persons, objects, events and logical programs) are also subject to very broad inter- and intrapersonal fluctuations. The effects of sex, intelligence, personality, fatigue, and repetition of the context have been brought out by music psychologists. The listener's associations at his first, uninfluenced listening to an unfamiliar context, are free associations; repetitions have the tendency of reinforcing the latter. In addition, people are strikingly consistent in accepting semantic interpretations of music

offered by competent outside sources; these consistencies help to consolidate the interpretations as valid. Words to vocal music, librettos, verbalized programs for symphonies, "Program Musik" in general, and interpretations in music appreciation are the readiest examples.

The affective responses to music and personal preferences have been used from time immemorial to relieve emotional disturbances, e.g., to convey comfort in the state of acute grief, to secure an outlet and substitute satisfaction in the states of languishing, to help emotional adjustments (e.g., increasing courage through battle songs), and to promote general stability in the daily and periodic cycles of our emotional fluctuations. The affective power of music can, it would seem, also promote mental health. The long history of music therapy is one of utilization primarily of the affective power; the associative affects have been barely exploited; the psychosomatic effects so far have been almost completely neglected.

Music Therapy

Brief History of Music Therapy

Music therapy in American hospitals started with concerts arranged for the patients who often participated in them.9 During the Second World War, the Army started a music therapy program in the Walter Reed Hospital in Washington,10,11 and similar activities continued in more than forty field stations (out of the total of 176) of the Veterans Administration.12 Several states have adopted music therapy in their hospitals (e.g., the Manhattan State Hospital, New York; State Hospital, Middletown, Conn.). The State of California has an extensive music therapy program in the state mental hospitals, the music therapist being required to have college credit in music therapy. Phipps Psychiatric Clinic at the Johns Hopkins Hospital and Eloise Hospital, Mich., are the private institutions leading in music therapy. Many institutions

use music for the purposes of occupational therapy (e.g., rehabilitation of speech and hearing), or for recreation to prevent the mood of "hospital nihilism." Physical and cerebral inoccupation are secondary sources of mental disorders; these occupational-diversive aspects are, however, outside the point of the present paper.

**Music Therapy and Psychosomatic Medicine**

Effects of music upon the functions of the human body have not yet received extensive study. The psychosomatic effects of music on respiratory rate, blood pressure, gastric activities, athetotic tremors are fairly well established. On the other hand, "driving" effect of music on the heart-rate is disputed, and certain basic electric activities (EGG, EEG) are definitely unaffected by music. On the whole, little doubt can be raised concerning the potential value of music as a form of non-specific therapy in psychosomatic medicine. For example, music can beneficially influence gastric functions and create favorable conditions for cardiac activities. These topics are also outside the scope of the present study.

**Music as an Aid in Psychotherapy**

Psychiatry should not and does not refrain from recognizing all possible types of interaction patterns reflecting mind-body relationships. In certain situations (e.g., in the psychoanalytic interview) we have a fair insight into the patient's mental processes (conscious and subconscious) without any access to the parallel events in the central nervous system. Various spiritual forces,


religious faith, love, friendship, poetry, creative and reproductive art may well achieve therapeutic goals. In this connection music may also well represent a most valuable tool in the psychiatrist's hand.

The affective power of music on mental patients has been shown in numerous cases. Music can not only create, but also modify existing moods, and more importantly, it can achieve such interaction through properly planned use in a specified desirable direction. However, in the case of the mental patient, the first contact has to be established in the dimensions of his personal preferences rather than in the general affective dimensions of music. This recognition led Altshuler to the formulation of his "iso-principle," stating that the patient should be contacted by a kind of music which has maximal affinity to his actual mood. Subsequently and very gradually, the patient's mood can be changed by the affective power of music. For example, a patient with catatonic schizophrenia can be contacted by calm music; subsequently he should be given a stimulant type of musical exposure. Conversely, the overactive patient is best contacted by a demonic type of musical exposure and can be successively appeased by a sedative kind of musical stimulus. Music therapists have attempted to draw up catalogs, especially of recorded music, to identify the typical affective responses and to formulate musical prescriptions for mental disorders and emotional disturbances.

Of course music therapy is not thought of as immediately grasping and expelling the evil. But even pessimistic appraisals concede that the power of music can alleviate the symptoms of mental disorders. On this basis alone, music therapy, affording temporary relief for sufferings, would be justified. But music has been shown to achieve far more. For example, music can facilitate other types of treatment. Music has been tried in conjunction with hydrotherapy and shock therapy and also in combination with drugs and anaesthesia. Altshuler reported synergetic facilitation. In these ways music can contribute to the success of a therapeutic team.

In exceptional cases, the effect of music can indeed be compared to a sort of "radical" therapy. The ex-musician and the professional musician, as mental patients, represent asymptotic cases with sometimes spectacular results. Altshuler’s famous case of Horace\textsuperscript{21} concerns a patient who discontinued piano playing. A schizophrenia of the catatonic type was cured by bringing back the patient to reality by music. In several known cases, music has helped the recovery of the insane musician. Schumann’s case history deserves special attention. A famous conductor was operated for brain tumor; he is now back at the concert stage. One can conjecture the powerful role music had or might have had in the therapeutic process.

The opposite effect of music has been also proven in case histories. In rather rare cases of musicogenic epilepsy, the extreme form of audiogenic seizure, music can evoke convulsions even in the absence of any other physical symptom.\textsuperscript{22}

The pleasure-pain principle alone could not account for the explanation of the therapeutic effects of music. A deeper explanation is needed. From a true understanding of the place of music therapy in psychiatry could come a program for advanced music therapy not now usually encountered.

**Advanced Music Therapy**

Current psychoanalytic and psychodynamic theories consider the psyche as a battlefield of subconscious instincts, logical drives, and ethical motivations. The situation is essentially dynamic in its nature, involving sets of forces and constraints which change continuously in time. A long-run steady state is reached in the normal psyche which could be termed the psychodynamic equilibrium.

Psychodynamic equilibrium is the counterpart to physiological homeostasis. Modern systems theories invoke the Entropy concept. The organism tends to maintain its own Entropy at a steady level in homeostasis and to raise this level in all processes of growth.

Let us now turn to the disorders of the psychodynamic-homeo-

\textsuperscript{21} Pikler. “Music and Mental Health.” *op. cit.*, 23.

staticentropic process. The psychoanalytic conception of mental disturbances reduces all disorders to conflicts, i.e., disturbances of the psychodynamic mind-body equilibrium. On the psychological side, the first symptoms appear as emotional disturbances which grow into neuroses and psychoses. On the physiological side some disequilibrium of the homeostasis will emerge having its site in one particular sector of the body or its functions (heart, stomach, etc.) or in some area of the brain.

Altshuler was first to envisage the intervention of music as a psychodynamic-homeostatic agent. His dynamic reference frame is Freud's Id-Ego-Superego. Music can intervene at all levels of psychical life and aid psychotherapy. It is capable of releasing suppressed instincts, of influencing our egoistic drives, also of mobilizing our conscience and securing “sublimations.” Music can be envisaged as a homeostatic factor in mental therapy.

In the present connection our interest is focused on music as a force arising from its affective and associative power. Our own emphasis, from the point of view of future research and development, is on the creative-imaginative, semantic-associative power of music which leads us to the concept of Advanced Music Therapy. While it is clearly understood that the task of diagnosis and of devising a therapeutic program remains in the psychiatrist's province, the advanced therapist is competent to mobilize, organize and consolidate the associative power of music to accomplish a concrete psychodynamic task. In the intuitive sense, the professional musician is already familiar with the weapons and tools of the psychotherapeutic arsenal. He can readily identify himself with certain routine concepts of psychiatry (release of suppressed instincts; reinforcement of the Ego; restoration of self-confidence; sublimation of drives, etc.). Like the composer of a song, affected by the poem, the advanced music therapist is seized by the mental case and therapeutic program. He can translate the latter to his own language and incorporate its verbalized contents in the form of musical Leitmotiv-patterns. No one-to-one, dictionary types of correspondences exist; a preset cataloging of “canned music” could not serve advanced therapeutic goals. The advanced music therapist's task is creative-imaginative.

tive; he draws his inspiration from the inexhaustible resources of psychodynamic music appreciation. Constantly resounding in the brain of the advanced music therapist and immediately on call, the vast ocean of music can be portrayed in psychodynamic terms of human conflicts and their solutions.

The advanced music therapist can even foresee new dimensions in psychotherapy, one of which is humor in music. Curiously enough, disregarding the deep significance of humor and wit as voiced by Freud, the current trend of music therapy has completely neglected music as a force inspiring humor. Many forms of humor represent pseudo-conflicts to the normal individual and, therefore, pseudo-dangers for homeostasis. Correspondingly, the moment at which a mentally ill or emotionally disturbed person first responds to humor, can be crucial. Recognizing a pseudo-conflict in the form of a laugh or a smile, may be the first sign of recovery. Ingenious exploitation of the force of humor, smuggled into the therapeutic maneuver in the form of music therapy, may secure undreamt shortcuts.

One form of the music therapist’s participation would utilize his presence at the psychotherapeutic session; he could intervene in statu nascendi whenever required. The music therapist’s activity, being so closely dependent on the leadership of the psychiatrist, would still qualify merely as a kind of background or shadow therapy. Music therapy may rise on its own wings when, in accordance with the psychiatrist’s instructions but in his absence, it is administered along parallel but autonomous lines. The advanced music therapist, an ingenious performer gifted with the talents of composing music, is by no means bound by the conventional constraints with respect to melody, harmony, rhythms, tempos, etc. He (only he) is permitted even to distort classical music without the guilt of desecration in behalf of a definite goal. The music therapist is also not bound by the constraints of the Western tone-system; he can resort to other intervals and use every conceivable tonal effect which, in our day, is accessible by the means of electronic music.

Dynamic psychiatry opens another horizon. The striking evidence for the effectiveness of music therapy is really not furnished by interesting hospital cases. Just as the fundamental effect of penal law is counter-motivation against crime and is invisible, the prophylactic use of music for preventing mental disorders, is
the most striking evidence although it too is invisible. Taking for granted that neuroses grow out of emotional disturbances and that neuroses lead to psychoses, one can see that music acts not only as a temporary sedative even for normal people. Music is more than a miraculous tonic in the pleasure-pain mechanism, music is also prophylaxis. The singing slave, the roustabout or sailor with the chants and chanties come to mind. Our continuous drive for singing is the readiest, everyday example. Music, when introduced into the psychodynamic process as a psychodynamic agent, acts as a regulator. This subtle control of behavior could be termed "subclinical, preventive music therapy."

Again, the musician himself represents the asymptotic case. The professional musician (including even the eccentric type), is best prepared to preserve the foundation of his mental health, by self-administering, day by day, the psychodynamic process of mental curing. Using the current phraseology of control systems in engineering, one could refer to the continuous feedback effect of music (essentially a generator of affective fluctuations)—used not to create but to appease existing fluctuation. Accordingly, the musician, at his moments of peak, seeks for musical outlets which will deaccentuate future fluctuations. The conventional recommendation for the every day use of Bach’s Welltempered Clavichord stems from the recognition of its power to achieve equanimity. In avoiding outlets which will accentuate fluctuations, the musician is least exposed to the dangers of uncontrolled energy-accumulations ("abreactions").

In a life dedicated to music, this art acts as an ideal balance wheel in all spiritual sectors. The musical outlet does not involve personal "shame," nor "guilt-consciousness," and should qualify, according to psychoanalytic philosophy, as an optimal outlet. In music, shame and guilt are actually sublimated in the most universal form, i.e., mankind's humility before God, in which every individual has his share. This aspect of music is reflected in Bach's cantatas and oratorios. Schubert's Lied, "An die Musik," translates the musician's gratitude toward music for supporting him in his emotional disturbances. One could quote Altshuler: "Performing musicians are particularly benefited. One wonders how many musicians have been saved from developing a neurosis or a psychosis because of their profession."24 Many musicians are

24. Ibid., 3-18.
aware of this psychodynamic control process and recognize their privileged situation.

If the patient is a singer or a performing musician himself, music therapy can take the analogue of "psychodrama." In the psychodrama the patient is encouraged to "playback," as an actor, his own psychological case history. By securing such sincere outlet in the initial, "permissive" phase of the therapeutic maneuver, the psychiatrist expects to gain information and in the meantime, to procure relief for the patient. In the musical psychodrama, the musical patient ought to enjoy maximal freedom, regardless of conventional constraints on musical performance. By the intuitive use of this tool (a sort of projective technique), the music therapist may gain continuous insight into the mental status of the musical patient and guide his emotional life. Many music teachers have similar control over their students.

The detrimental effects of music as a vector in all dimensions and directions of the psychodynamic process, must also be emphasized. Unwanted music, especially in the case of advanced musicians, causes nervousness, may lead to neurosis and have even psychosomatic effects. The musician, when hearing music, can hardly refrain from listening to it. The task of musical hearing is a heavy load, causing fatigue even in the case of desirable music. While the musician is maximally sensitive (in the affective sense) to exposures to noise, unwanted music is for him worse than noise. The latter, at least, does not compel him to listen and to tie up, involuntarily, his auditory resolution power. Music, as a negative vector, counteracting homeostasis, deserves special attention. One wonders if, in the case of musicogenic epilepsy, convulsions are evoked by any type of music, or merely by some "non-iso" type of exposure. Are there unlisted types of musicogenic neuroses such as might stem from reluctantly performed musical duties? Are there musicogenic psychoses which, generated by the overdriving of the musical transfer functions, could explain the tragically short life spans of the great composers?

Few people are completely indifferent toward music. Even those with minimal talent for musical hearing, are still subject to the affective and associative power of music. Amusia (lack of correlation of behavior with respect to the musical stimulus) is a pathological phenomenon.25

SPECIAL PROBLEMS IN MUSIC THERAPY

The Need and Suggestions for a Valid Reactivity Test

The first question in music therapy to arise is the patient's expectable reactivity or susceptibility to such therapy. This preliminary problem can be compared to susceptibility in hypnosis, or to transference in psychoanalysis. Most mental patients are responsive to music therapy if administered at the appropriate level of music. A high correlation with basic musicality is obvious. Since the customary tests of musical talent (Seashore, etc.) are centered on elementary auditory abilities rather than on the affective and associative responses, these tests are inappropriate to serve our specific purpose.

The great majority of normal people are affectively responsive to simple tunes in the natural (Western, diatonic) tone system for which the psychophysical resolving power is maximal. The mental patient brings somewhat the same affectivity into the mental institution and is generally susceptible to music therapy in the form of folk songs or old familiar tunes. We have already seen that amusia is a pathological phenomenon. Finally, mental patients with advanced, though dormant, musicality can be intensely affected by classical, romantic, and modern music. This opens an arsenal of tools.

There is no standardized reactivity test. The need for such a test is obvious. The reactive patients must be selected out of large groups and classified according to the appropriate levels of their reactivity. Failures to detect the patients' higher levels would deprive psychotherapy of one of its best opportunities. One could not, of course, hope for too rigid standardization of the reactivity test on the basis of psychometric methodology. The music therapist's rating scale will have to evaluate somewhat more indistinct correlations between musical stimuli (melodies, harmonies, rhythms, timbres, patterns, contexts) and motor behaviors (facial expressions, foot tapping, beating the rhythm) and also psychosomatic responses (effects on respiration, tremors, galvanic skin response, etc.). Reactivity in relation to humoristic musical effects may represent a crucial aspect to the test.

One of the intricacies pertains to securing the non-cooperative patient’s participation in the test, sometimes without his knowledge, by simply exposing him to music and making the required observations. Group testing of reactivity opens special problems.

**Psychodiagnosis by Music**

In the psychology of personality testing, little attention has been paid to music as a projective tool. Music teachers and advanced listeners are well aware of the potentialities of personality diagnosis based on musicians’ actual performances; but to describe the passive listener’s personality profile, some generalized technique has yet to be found.28

The general control group (normal people, non-musicians) and selected normal groups (musicians) are fairly consistent in their musical tastes. Their preferences with respect to musical stimuli could be projected in the form of their rating scales. Groups with various mental disorders would be expected to respond in significantly different ways to the same musical exposures.29 In this connection, Altshuler’s iso-principle implies a shift in musical preferences; “non-iso” music would fail to contact the patient helpfully and might even irritate him. More generally, the whole rating scale of a patient could be shifted, transformed, or even inverted. Statistical reliability of such shifts is open for testing. The affective dimensions should also be explored. Projective diagnosis would seem to be promising with patients who attained a high score on the reactivity test. Projective techniques could be used for permanent observation during the progress of therapy.

**Feasibility of Group Music Therapy**

Since mental patients are cared for in large groups, not only reactivity testing but therapy itself should be available for group administration. The feasibility of group music therapy has been demonstrated in numerous cases, at least in certain therapeutic dimensions (resocializing). Future research should provide us with techniques for establishing equi-reactive groups with comparable diagnoses, at the required level of social coherence. Devising techniques for guiding such ensembles in music opens research problems in group dynamics and music psychology.

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While the public domain of the classical drama (Sophocles, Shakespeare) and mythology has been widely exploited for illustration of psychodynamic theories on conflicts and catharsis, comparatively little interest has been paid to the psychodynamic appraisal of music. Remarkably, the 19th century philosopher, Nietzsche, actually recognized the primacy of music in relation to tragedy and catharsis. He derived the genesis of tragedy from a successful integration of two elementary and conflicting musical forces: the Dyonisian rage and Apollinic spirit of harmony. The psychodynamic features of conflicts can be observed in all frames of reference (pitch, loudness, time) and all structure (harmonization, modulation, orchestration, etc.) in music. Whenever a deviation from a steady state occurs, music reveals some conflict. How can music convey catharsis? To answer this question, let us now turn to the broadest dimension of music, its philosophy.

The psycho-dynamic conflict problem is at the very center of Beethoven's music philosophy. Beethoven's music reveals conflicts between the individual and the society (Coriolan), the oppressed (Eroica, Leonora, Fidelio), mankind and fate (Fifth, Seventh and Ninth Symphony), love and platonic ideal (Moonlight Sonata, Appassionata). All conflicts are actually solved on earth (Eroica), in heaven (Ninth Symphony) or in metaphysical regions (last string quartets).

A reappraisal of Mozart's music (which is ordinarily looked at as a serene world), reveals conflicts between love and tyrannism (Abduction), darkness and enlightenment (Magic Flute), demonic instincts and social order (Don Giovanni), melancholia and exaltation (Symphony in G minor, Piano Concerto in D minor). Dramatic forces are also manifest beneath the apparently radiant surface of Schubert's music (Unfinished Symphony, Lieder).

Wagner's oeuvre represents a lifelong struggle in displaying and solving various conflict-problems in terrestrial and mythological spheres. Conflicts presented in Wagner's music dramas are as follows: reality vs. a remote ideal (Flying Dutchman), sensuality vs. platonic love (Tannhauser), irrationalism vs. rationality (Lohengrin), love vs. mediocrity (Meistersinger), sensuality vs. faith (Parsifal). The solutions are presented in the form of supernatural transfigurations.
Verdi's music dramas reveal a variety of conflict-problems such as love vs. patriotism (Aida), clownishness vs. personal tragedy (Rigoletto), love vs. moral prejudice (Traviata), love vs. jealousy (Othello), tyranny vs. conscience (Don Carlo).

The classification of Bach as a creator of a one-level type of music without conflicts, is superficial. The conflict-element is revealed in the cantatas and oratorios; it is focused on guilt-consciousness and languishing for redemption. The sequence of Prelude and Fugue stands for sadness and reconciliation, or for mediatation and creative action. In the Organ Toccatas, the conflict-problem is attacked at the cosmic level; the struggle is between the forces of Chaos and Cosmos.

Handel's conflict-problems were drawn from two classical sources of human conflicts: the Holy Scriptures and Mythology.

Undoubtedly, music literature also encompasses one-level type of music. For a deeper interpretation, psychodynamic music interpretation has to delve into the composer's psyche. The composer may have solved his conflicts outside the creative process and revealed in his art the final solution only, for example in the form of terrestrial serenity (Haydn), or in escape to Fairyland (Mendelssohn). Or, under the pressure of his conflicts, he may not have arrived at their solution. Thus, in Chopin's and Schumann's music, we sense only temporary rests between renewed struggles. Chopin's conflicts are manifest as melancholia. Schumann's struggles are reflected as tragic overdrives. Their music does not reveal "catharsis."

Problems of conflicts are reflected also in humoristic music, though in a distorted form. Pseudo-conflicts, which also constitute the essence of comedy and tragicomedy, are often aggrandized in the humoristic spheres of music. Such pseudo-conflicts could not jeopardize the normal flow of life and, yet, are "solved" with exaggerated magnificence, sometimes in the form of pseudo-transfiguration. The latter form the counterpart to catharsis in tragedy. Examples of such humoristic conflict-patterns are: the feeble jailer vs. freedom (Osmin in the "Abduction"), senility vs. the love of young people (Don Basilio in the "Barbiere"), intrigue vs. simplicity ("The Marriage of Figaro"), mediocrity vs. genius (Beckmesser in the "Meistersinger"), mania of persecution vs. reality (Don Quixote), feudal anachronism vs. the order of new society (Falstaff).
Psychodynamic music interpretation can greatly contribute to the analysis of conflict-situations, lead to their appraisal for the purposes of music therapy and inspire the work-program of the advanced music therapist.

**Summary and Conclusions**

The various transfer functions which convey music to the listener, include besides the well-known affective reactions, a large potential for evoking semantic-associative responses which are hitherto unexploited in music therapy. Utilization of the associative power of music is conceivable in the frame of reference of psychodynamics. Here, neuroses and psychoses are usually interpreted as disequilibria of homeostasis. Correspondingly, musical exposure as a restoring vector, could well be tailored to the various situations in psychodynamics so as to exploit also the associative power. After the psychiatrist has identified in the patient's psyche the nature of the conflict, the music therapist is called upon to find and formulate some musical equivalent for conflict and catharsis. A section on the psychodynamic interpretation of music offers a survey of subjects encompassed in music literature, interpretable in terms of conflicts and catharsis. At the advanced level of psychiatric treatment, the music therapist must rely upon the psychodynamic interpretation of music. The paper also discusses the feasibility of a reactivity test which precedes music therapy proper, in addition to psychodiagnosis by music and music therapy in groups.

**Statement**

Since this study is based on my observations and an extensive background in music, rather than on experimental work, it seems desirable to enumerate some of my considerations which may be new:

1. A generalized concept of the musical transfer function in the frame of reference of the new information and communication theory, and with an emphasis on the semantic-associative responses.
3. Appraisal of the role of humor in music; its role in music therapy and in psychodiagnostics of mental diseases.
4. The "subclinical feedback effect" of music on performing musicians.
5. Musicogenic neuroses and psychoses.
6. Susceptibility to music therapy and the reactivity test.
7. Psychodynamic interpretation of music; conflict and catharsis in the literature of music; utilization of the conflict-catharsis principle by the music therapist in selecting his musical material.
A PSYCHOLOGIST LOOKS AT MUSIC THERAPY

THOMAS E. BOLDUC

Any factor or agent that helps to prevent an illness, alleviates or cures diseases, or otherwise aids physical or mental health, can be regarded as therapy. In other words, the term therapy should be employed in its broader sense. It follows that no discipline has a monopoly on therapy and each of the various disciplines has contributions to make to the total treatment effort. In this sense then, the music therapist is part of a team (not a league of several teams); a team which through the years has expanded to include a wide range of professions. In medical settings, of course, the physician or medical specialist should assume the final responsibility of the treatment program. Music therapists, bring to the program specialized training and skills which afford a unique approach to individuals who may be resistive to other forms of help. The potential value of music as a resocializing agent is immense. Music is capable of changing mood; it can overcome depressed feelings and calm hyperactive individuals. It can change a dissatisfied and destructive state to a satisfied and constructive one. It can be effectively used to bring patients out of seclusion, relieve tensions and facilitate contact with reality by relaxation and the creation of an emotional outlet. In short, it can serve as both a tranquilizing agent and a cathartic one. This is a versatility which should be exploited. Socialization of the sexual instinct is also facilitated through music, whether it be through the dance, vocal chords, or instruments. It provides an avenue for emotional relief which does not conflict with the taboos and restrictions of society.

Offering patients an opportunity to "abreact" through music is a great step toward emotional freedom and ego strengthening. Music can be a natural substitute for fantasy states, anxiety and excitement. It can be used most successfully to take you out of yourself, so to speak. For example, when you are in a state of anxiety, you are emotionally distraught and excessively worried about matters close to you. In such times you are almost certainly self-centered and preoccupied with alarming thoughts, which serve to maintain the anxiety. Music, I believe, can provide relief from these inner stimuli by taking the individual out of himself through diversion and substitution. This can be a most pleasant way of keeping ones emotions untroubled.
The essential aim in any therapy is to help the individual achieve a reasonably adequate social adjustment. In a sense it is the ability to cope with everyday life experiences without opposing society’s values that constitutes an acceptable social adjustment. We might say then, that the goal of music therapy is to rehabilitate, resocialize and re-educate an individual through active and passive participation in music. How is this accomplished? This is where the specialized training of the therapist is utilized. As a psychologist who is relatively unfamiliar with the specific techniques employed by music therapists, it is quite difficult to discuss this area. I suspect, however, that music, like most other forms of therapy, can be applied to an individual, a group of individuals, or to an entire population. Individual music therapy would stress the interpersonal relationship established between the patient and the therapist. This, I feel is crucial for without a therapeutic relationship, little sustaining progress will occur. The relationship can be of more importance than any music skills acquired. This factor would probably distinguish between a music therapist and a music teacher, just as it does between a recreation therapist and a gym instructor. This is not to say that learning new skills cannot have therapeutic benefit. Many individuals achieve a feeling of self-confidence if they develop such skills as singing or playing an instrument, batting or kicking a ball. But how much more would be accomplished of lasting benefit if a therapeutic relationship was established.

Group work can serve as a medium for bringing people together and uniting them, a force which creates unity and intimacy, even in the most varied congregates. Racial and educational barriers are easily overcome through music. Constructive competition can be fostered. But most of all, perhaps, it affords a non-threatening method of bringing people together, where all the skills of socializing are actually learned. In situations where verbal skills are limited, either through physical or emotional reasons, music can often reach the individual where other approaches fail.

My personal experience in this field of music therapy is limited. As a psychologist in a new correctional institution which is still in the program development stage, I have not been exposed to a music therapy program. Such a program is being developed, however, and information and ideas learned here from this convention will be of assistance. We do have a music teacher at the
boys school, but he claims he is not a music therapist. I have observed, however, that the majority of his day-to-day activities with the boys has a definite therapeutic effect. The essential ingredient here is his ability to relate favorably with the population.

How can a psychologist, for example, assist the music therapist? My only knowledge of music is through listening and music appreciation. This I feel is the rule rather than the exception among my colleagues. We are however, familiar with therapy. It is in this area that our contribution lies. We have evaluated the personality dynamics, strengths and weaknesses of each patient, and thus some notion of a treatment program is available. The problem, it would seem, is to apply music to this over-all program. Also as a psychologist, I am vitally interested in research. We should be continually evaluating our procedures and results in as scientifically a method as possible. In short then, I see the psychologist's role as a consultant to the music therapist in the training, application, and research of music therapy. It would help, of course, if the psychologist was familiar with music, including its more basic properties.
IF MUSIC BE THE FOOD OF LOVE, PLAY ON!

AUSTIN M. DES LAURIERS

The somewhat romantic title which I have chosen for my address to you can be misleading. Those of you who, having been well fed, are getting ready to hear another version of the eternal source of love which music is said to provide, should arm themselves with tunes and stand by for what could turn out to be a shattering experience, neither musical, nor romantic. Briefly, my concern, this evening, is twofold: (1) to attempt to extend to music therapy, as a specific treatment modality, some of the concepts developed in the understanding and treatment of major forms of personality disorders; (2) to open up for you, on the basis of these concepts, new vistas of therapeutic range and effectiveness through the utilization of music as the main instrument and tool of psychotherapy.

Any attempt at understanding human personality development faces us with a complex array of variables or events which, for purposes of systematization and clarity, we can conceptualize in terms of dynamics or in terms of structure. Dynamic concepts help us understand the forces at work in the individual that bring about his development, and contribute to its stability and maintenance. Structural concepts define the organizations or agencies which give direction and goal to the forces at work, and without which there could be no integration or synthesis in the individual of the innumerable experiences of his daily life. Correspondingly when we witness failures in personality development such as are evident, for instance, in so-called neuroses and psychoses, we can conceptualize these breakdowns either in terms of dynamics or in terms of structures. Thus we can think of most neurotic patterns of behavior as reflecting conflicts, within the individual, of various forces of opposing and contradictory influence, seeking to assert themselves; the disorder here results from conflictual dynamics. By the same token, we can shed some light on the major personality disorders, exemplified in psychotic conditions, by conceptualizing them as structural defects in the individual, that is defects in those psychological agencies which should provide direction, organization, integration to his behavior.

The development and establishment of those structures, in the individual, without which the reality direction and the integration
of his behavior becomes impossible, rests on the variety and complexity of sensory experiences which help the individual define himself as separated and differentiated from the world outside of him, and which give him the integrated experience of being somebody, in distinction from everybody else, as well as alert his interest and his attention to his own value and reality in this world. In other words, through early sensory experiences the human individual learns to define himself by establishing boundaries between himself and what is not he. And to the extent that he gives attention and interest, and love to these boundaries, to the same extent does he maintain his separation and differentiation from the world about him.

You finally heard the word love: you never thought I'd get to it. With this word, let me introduce the second theme which, stated simply, amounts to this: those individuals who have suffered a major personality breakdown are those who have ceased to love themselves. The structural defect by which we have tried to conceptualize their personality breakdown represents a loss of affective investment in those boundaries through which they could define themselves and separate themselves from others. We shall not develop this theme extensively. Just try to visualize what it means to have no boundaries; you're indefinite, you're amorphous, you don't know your right from your left; you float around; you hear music, and there's no one there; you smell blossoms, and the trees are bare; you think, but your thoughts are not yours; you feel, but you wonder who's feeling; you're alive, but you don't know what life is; you're dead but you ask for whom the bell tolls; you're in love, but you can't feel the loved one. Such is the structural defect of the mentally-ill: words but no music.

The second movement of this fantastic Berliozian symphony has all the slow and tentative smoothness of an andante cantabile. We finally introduce music. Of music, it can also be said, that it's main components are dynamic and structural. No music exists without structure: that's the basic rhythmical component of music. The melodic line, the dynamics of music, go nowhere without rhythm. Without rhythm, there is no direction, no organization, no integration. And if this is so, isn't there an inherent quality to music that makes it most intimately related to the basic requirements of personality development: dynamics and structure?

There is more to music, however, than dynamics and structure.
By nature, music addresses itself to our senses. Whatever stimulation it creates, whatever contact it achieves, whatever response it calls forth, we have to recognize that music accomplishes this by reaching us through our senses. We need not wax poetic here over the esthetic qualities of music nor over its capacity to speak symbolically of the highs and lows of the human soul. The direct impact of music is on our senses, and because it is through our senses that our first and most important contact with the world takes places in the early years of our life, can it not be expected that music will lend itself admirably to a direct and impressive mode of communication between two people?

At this point, as a third movement, I should introduce a brief scherzo, and unfold for you, with brilliant vitality, the picture of music as communicating a feeling of life to whomever it reaches; how it excites and alerts the attention by enveloping and surrounding the individual with the sound and fury of an incessant sensory bombardment; how it arouses a surge of feeling and a multicolored variety of impressions as its speaks through its melodic content; and yet how it maintains reason, order, direction and control through its rhythmical structure. These components of music can be directly instrumental in reinstating the conditions of life and reality experience in those persons who have lost the capacity to relate realistically and productively to the social and physical world about them because the sources of life, in them—the sensory experiences of their physical and psychological boundaries—have been allowed to dry out. If, as I have suggested, these boundaries which define the individual, are established and maintained by the amount of attention, interest, and love which the individual can invest in them, let me suggest further then, that any instrument which alerts this attention, fosters this interest, and gives attraction and value to the sensory experience it stimulates, will hold a potential source of life for the individual, since it will be a potential source of love. Such an instrument is music. But to be therapeutically effective, music needs a music therapist.

Oh! joy! with the crash of this cymbal, you can see the end coming. The great cadenza. The grand finale. With shameless and unabashed effrontery, I am about to tell music therapists how to do their work! Let me review briefly the central themes of this symphonic potpourri: the mentally ill patient suffers from a
structural defect in his personality development: he cannot relate to other people, because he does not experience himself as a separated and differentiated subject of the variety of life events which occur within him, he has lost his boundaries because he has ceased to pay attention to himself; he has given up loving himself. Reinstall these boundaries, and there's a chance that he will live again. Music can do this, because by its very nature music, within its essential dynamics and structure, creates a sensory impact on those it reaches, and this impact can have arousing and alerting effects. But music must reach the patient. And this is the specific role of the music therapist.

What I want to say here is simple: if what I described of the nature of mental illness and of the nature of music has any validity, then you cannot see your function as music therapists as an adjunctive one to other forms of psychotherapy. You cannot think of music, in a therapeutic situation, as just another sweet way of creating a mood or a proper atmosphere which would set the stage for what might be called real psychotherapy. You cannot, for instance, enthrall your patient with the enchanting sounds of the Moonlight Sonata, and then when he's titillating under your musical spell, stop the music and say: "O.K. Joe, now let's talk about your oedipus!" or, "When was the last time you had that crazy idea of killing your dear old dad?" You can do something different. You can let the music speak for itself, and make sure that its message reaches the patient. It reaches him when he feels it: it reaches him when he starts singing to it while you make sure that he knows his song is affecting you; it reaches him when he starts moving in rhythm to it, when he starts dancing to it, while you make sure, insistently, that he knows his movements are his and that he controls his dancing steps; it reaches him when he comes alive as the sounds envelop him, so that he knows you are doing this to him and that he is reacting to you. Then you don't need to therapeutize him about his conflicts, his fears, his delusions and his aberrations. You and the patient, closely in contact, in a pre-verbal world, where you need only the sensory exciting effectiveness of music to speak your presence to the patient and to make him feel alive with you. As you force his attention to himself, as you make him aware of his own reactions to the stimulation of music, as you refuse to allow him to escape the insistent and intrusive presence of yourself through music, the
patient can discover that he is separated and differentiated from you, since you are affecting him; he can discover his boundaries, since you are bombarding him with sensory experiences; he can discover that he exists, since you are creating the conditions of life for him. If this be so, dear music therapists, why not use music in its natural key, and if music be the food of life for the patient, why not play on and on and make it the source of love.
NEW CONCEPTS IN PSYCHIATRIC TREATMENT
RAY GLOVER

The future of music therapy in mental hospitals is ever changing as new concepts in psychiatric treatment are advanced. Blasco, speaking about the Veterans Administration's "full service" hospitals, states:

This new concept recognizes that hospital care ought to be only one phase of a continuum of treatment possibilities. It seems reasonable to expect that patients receiving intensive treatment will improve and, therefore, will not need to stay in the hospital forever. Consequently, the new hospitals will provide day care or night care, and in some cases both. They will have appropriate aftercare facilities and programs providing suitable extrahospital placement, such as foster home and nursing home care, halfway houses and supervised vocational placement.

Smaller wards and cottages are becoming more homelike in atmosphere with more stress being placed on social interactions and social learning. Patients will be following a more normal routine of eight hours work, eight hours of leisure, and eight hours of sleep. Activity programs will take place away from the ward or cottage area with emphasis on resocialization and meeting the reality needs of the patient. Blasco considers reality orientation as a very important therapy for psychiatric patients and states, "anything familiar to them should be used to help prevent loss of reality."

More emphasis is being placed on making the hospital community and its cultural aspects match more closely the community from which the patient came. Landy states: "In the therapeutically oriented modern psychiatric hospital the cultural objective of rehabilitators is to build bridges of support across stages in the 'long road home,' in which potential discontinuities may hinder the patient's efforts at psychological reconstitution and social acceptance." He believes one of the major problems is

2. Ibid.
to help the patient leave the hospital culture and the task of resocialization in the outside world. It is felt, that while in the hospital, patients should be in activities similar to those they will encounter outside of the hospital. In the case of halfway houses, integrated social action should be achieved by the members before leaving the hospital, although this does not guarantee a carry over in an outside setting.

It is up to us as music therapists to look toward the future so that we may continue to be of importance in the treatment program. More use can be made of music as a link between the hospital and community. The social values of music activities will continue to be of great value in the resocialization of patients and in helping them to make better use of leisure time. More stress will be put on the reality aspects of music along with other current concepts and above all, the music therapist will still have one of the best modes available for establishing a therapeutic relationship with the patient.
PART II
THE MUSIC THERAPY PROFESSION
The brief period from the end of World War II to the present has seen music therapy established as one of the professions contributing to the care of the mentally ill. Some attempts were made to use music in our military hospitals after World War I. World War II, however, was largely responsible for music therapy as we know it today. The USO Shows, that were such a potent morale force, helped develop the idea that permanent music programs in our hospitals could be used to help patients get well. As early as 1948, a survey conducted by the National Music Council showed that 117 hospitals had the services of full-time music therapists.

The National Association for Music Therapy was organized in 1950 with less than 100 members. Today the Association numbers more than 700. Twelve colleges and universities offer degrees in music therapy, and fourteen psychiatric hospitals are approved as clinical training institutions.

The concept that music is a potent affective agent is not new. Pindar, Pythagoras, Aristoxenus, Plato, Aristotle and others among the ancient Greeks commented on the aesthetic, social, and moral values of music. These ideas have been amplified, or at least restated, in the philosophical and medical literature throughout the three thousand years that comprise the development of Western Civilization. Yet the brief period from 1945 to the present has seen the synthesis of these concepts into the beginnings of a systematic science or art, with a respectable body of theory and competent clinical procedures.

To some extent this rapid growth can be attributed to the significant amount of research completed. Equally important has been the development of the National Association for Music Therapy. However, most of the credit must be given to the complex of mental health professions that have created a climate in which music therapy is needed.

First, we will discuss some developments in these professions that have made the growth of music therapy possible. We will then briefly trace some parallel developments in music therapy.
research. Finally, a definition for music therapy will be advanced and illustrated with clinical examples.

DEVELOPMENTS IN ALLIED PROFESSIONS

Around the turn of this century, Freud initiated the psycho-analytic movement that became, within a relatively short period of time, the dominant movement in psychiatry. It seems safe to say that the most important developments in psychiatry during the first thirty years of this century were accomplished either in amplification or criticism of Freud's theories. Even our most recent advances in social psychology and group dynamics owe much, conceptually and semantically, to his earlier discoveries. Freud's views on conflict changed as his theories developed. However, the psychonanalytic view on a basic type of conflict remained fairly stable. Freud stated that unconscious strivings of the individual, often unacceptable socially, come into conflict with the prohibitive part of the personality, made up generally of socially acquired controls. These two aspects of the psyche, the "I will" and the "thou shalt not" compromise and find expression in the third part—the conscious, acting part of us. Topographically, this could be stated in this manner: the id comes in conflict with the superego, and compromises between these two are expressed by the ego. A story often told in psychology classes illustrates this phenomenon. A young man, while walking down the street, sees a beautiful young lady. The id says, "let's go after her"; the superego says, "leave her alone"; and the ego says, "let's get a sandwich, and we'll come back later and see if she's still here."

The analytic concept of conflict, a part of which was discussed above, can be taken as an illustration of individual-oriented, or "intra" psychology. According to this view, both theory and therapy are concerned with the individual. The main core of psycho-analytic therapy consists in the uncovering of repressed material in the individual's unconscious, usually through the technique of free association. Freud recognized a type of group behavior, but even here his views were individual-oriented. Collective behavior was considered to be an extension of individual action with cultural restraints removed. Therefore, an individual interacting in a crowd could behave in an unrestrained manner because he
felt free to “throw off the repressions of his unconscious instincts.”

A consequence of individual-oriented psychology is that it requires a one-to-one relationship in therapy. Since all psychological conflict is viewed as emanating from within the psyche, the therapist is required to spend many hours alone with the patient in order to work through the repressed material. It would be impossible to submit the large numbers of patients in our hospitals today to psychoanalysis, or any type of depth therapy. It would require several times the number of psychiatrists available to extend adequate coverage.

An outgrowth of the Freudian movement provides a second event of importance to music therapists. Milieu therapy was developed at the Menninger Clinic in Topeka, Kansas during the 1930s. Under this concept, a protective, controlled environment was initiated as an adjunct to the treatment of psychiatric patients. Recreation activities such as basketball, volleyball, golf, touch football, tennis and boxing; arts and crafts activities including leatherwork, ceramics, painting, weaving and metalwork; and musical activities such as orchestra, dance band, and private lessons on the various instruments were made available to patients. Use of these activities was not unusual at this time; most institutions had recreational programs of various kinds. However, an important advance occurred when these activities were analyzed for their inherent therapeutic values and, at times, were prescribed much as drugs were being prescribed at other institutions. For example, a patient with a considerable amount of unconscious hostility might be assigned to menial, unpleasant activities such as gardening or sawing wood. The goal in a situation such as this might be to “work off” hostility, and to bring some of it to the surface so that it could be expressed consciously.

This aspect of the milieu program must still be placed under the heading of “intra” psychology in that the utilization of activities was still directed toward the inner life of the individual. However, another important potential of the activity program was being utilized at the same time. Each activity was conceived and utilized as a “life situation,” and close attention was paid to interpersonal relationships developed by the patient in these activities. Questions such as, “how did basketball practice go today?” be-

came an integral part of the treatment program. Relationships between patient and therapist, patient and patient, and patient and group could be assessed and manipulated in therapy. For the first time, the music therapist became a primary agent in the treatment of patients. He was required to know the patient's medical and social background, as well as his immediate and long-term treatment goals. His activities were guided by psychiatric prescription and frequent staff consultations.

The use of prescribed activities with emphasis on relationships, marks a beginning of what might be termed the "inter" phase of psychiatric treatment. Group situation is now used to effect personality modification. However, theoretical guidance is still derived from psychoanalytic principles.

Milieu therapy has exerted a considerable amount of influence in the psychiatric institutions of this country. Certain aspects of the milieu program, such as prescribed activities, are now commonplace. However, difficulties have been encountered in its utilization in the large psychiatric hospital. Therapeutic effectiveness of the milieu program depends upon close cooperation between psychiatrist and activity therapist. Such cooperation is usually difficult to achieve in larger institutions because of the scarcity of psychiatrists. Milieu therapy has, however, given music, occupational, and recreational therapists a valid theoretical framework in which to operate, and has helped create an identity for them in the psychiatric profession.

A second, and parallel, development should be mentioned as important to music therapists. This concerns the emergence of two professions that, possibly, are accomplishing the first major revolution in psychiatric treatment since the advent of the psychoanalytic movement. These professions are social psychology and group dynamics. Social psychology is concerned with the development of the individual in relation to his environment, and particularly with the influences that groups in the environment exert on his beliefs and actions. Group dynamicists are interested in the acquisition of knowledge, through empirical means, about the structure and function of various types of groups. Both of these professions have helped develop the realization that mental illness is often caused by the individual's interaction in groups and that groups may be used as agents in his treatment.

A number of social psychologists and social psychiatrists are
now actively engaged in therapy in our institutions. Their emphasis on the etiological and therapeutic potentials of groups have given music therapists new and important theoretical constructs with which to operate. As an example, the work of Jones and his associates has demonstrated that patients, when placed in groups, may be effectively helped by other patients when elements such as group cohesiveness and group pressures are introduced and utilized.

The development of research in music therapy

An interesting analogy can be noted in the growth of psychiatry and the development of music therapy. As stated before, Freud and his psychoanalytic concepts dominated American institutional psychiatry after 1910. These concepts were given the label of "intra" psychology. The immediate history of music therapy also shows considerable concern with the effects and affects of music on the individual. Such early investigators as Hyde and Scalapino, Diserens, and Treves noted the effects of music on the pulse rate, blood pressure, striated musculature, and respiration rate. Schoen and Gatewood investigated the mood affects of music using 20,000 subjects, and found these affects to be "strikingly uniform."

Early in 1950, music therapy research was entering a new phase. Graduate students, under the direction of Gaston, were investigating problems such as the sedative effects of music on acutely disturbed patients, the effects of music on children's draw-

ings,\(^8\) and postural responses to music.\(^9\) It should be noted that the majority of research at this time was still concerned with the "intra" point of view.

One reason for the predominant interest in this line of investigation was the realization that certain types of music could be used to control behavior. Sedative music could sometimes be used to quiet disturbed wards, and stimulative music could often be used to raise the mood level of apathetic patients. Also, during this time the "iso principle" was stated by Altshuler.\(^{10}\) This principle, which originated with the ancient Greeks,\(^{11}\) is homeopathic in that moods are matched by music, and the music is then altered to bring about a desired mood change. For example, highly stimulative music might be played for disturbed patients, and as the music becomes quieter or more sedative, the moods and behavior of the patients often change with the music.

In the 1950's the discovery of tranquilizing drugs, along with their use on a massive scale, seriously curtailed the "intra" type of research. Behavior could be altered much faster and for longer periods of time than was possible before. This led music therapy research in other directions. Many of the experiments being conducted today generally concern the use of music in the facilitation of social interaction.

**Music Therapy Defined**

Music therapists work with exceptional children, physically handicapped children and adults, tuberculosis patients, and in correctional institutions. The large majority, however, work with emotionally disturbed adults and children in psychiatric institutions. The following definition will apply only to psychiatric music therapy, even though many of the principles have application to other types of disorders.

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Music therapy may be defined as the medically supervised use of music; and the music therapist, as an agent in the treatment, rehabilitation, and entertainment of patients.

In modern hospitals it is assumed that psychiatric patients need treatment because they can no longer relate to other people. A patient’s interpersonal relationships have been disrupted to the point that he must have a controlled, non-threatening environment in which to erect new, realistic defenses to meet the strains of everyday living. The hospital serves as a mikrokosmos, or small world, in which staff members exert every effort to give the patient new experiences in living, new methods for meeting everyday problems, and new ways of getting along with people. Each staff member has a rather well-defined part to play in this effort, and the cooperative efforts of the combined staff are mobilized toward returning the patient to the outside community as a responsible, well-functioning member of society. This cooperative approach is known as the “psychiatric team” concept. Because many patients require physical as well as psychological care, the psychiatrist with his medical background is traditionally the team leader. The reason that “medical supervision” was included in the above definition stems from the fact that the music therapist is only one member in the treatment team, which traditionally includes psychologists, psychiatric social workers, psychiatric nurses, nursing aides, and psychiatrists.

A distinction was made in the definition between the use of music and the music therapist. This is due to the belief that there are some therapeutic values inherent in the music itself. This is closely related to the “intra” concept discussed above. Philosophers, educators, and medical personnel have emphasized the therapeutic potentials of music for several centuries. Probably the best summary of these ideas is expressed by Gaston. While inherent therapeutic elements in music are easily inferred, empirical investigation is almost an impossibility. For this reason, and also because of current psychiatric practice, the emphasis is placed on a well-trained musician who has also had some training in psychology.

The statement that music therapists provide treatment or

therapy for patients has caused a considerable amount of controversy. Without probing the semantics of the question, such as what is treatment and what is therapy, it is possible to state that in certain specific areas, music therapists do engage in therapy. These areas are: (1) therapeutic potentials inherent in the activity; and, (2) direct, controlled procedure with psychiatric supervision. A third area, that of goal-direction as a prerequisite for therapeutic procedure, has been described elsewhere.13

Inherent therapeutic potentials in music should not be confused with those potentials founds in the music therapy activity. While the two are interrelated, it is helpful to think of them as separate entities. Most music therapists conduct ward programs without supervision by medical personnel. In some hospitals as much as 50 per cent of the therapist's working hours are spent on the wards. Several types of activities, including group singing, rhythm band, exercise to music, and simple dance programs, are used. These activities may become therapeutic if the therapist formulates realistic goals and works toward their accomplishment. For example, when patients are confined to closed wards, muscles tend to become flaccid, and many patients show progressive loss of attention span and increased disorientation. This is particularly true of geriatrics patients. However, with a regular exercise and dance program, muscle tone is often improved, and some patients show psychological benefits. If the therapist is careful to learn each patient's name and manages to speak with him during the activity, the session becomes even more beneficial. In this example, a certain activity is initiated with specific therapeutic goals in mind; the activity becomes therapeutic, and the music therapist is practicing therapy.

In another example, a patient, diagnosed as schizophrenic, paranoid type, was present at a monthly birthday party conducted by activity personnel in an Indiana hospital. This patient was housed on a closed ward, and was noted for his uncooperativeness and hostility. While the patients were singing, a music therapist noticed that the patient seemed to have a good voice. After receiving the doctor's permission, the patient was invited to join a church choir and the hospital chorus. After a few months of

working with the music therapist, the patient learned to cooperate to a certain extent with other members of the group, and gradually exhibited much less hostility during the sessions and on his ward. He was eventually moved to an open ward. As the two music activities were the only changes in his schedule, it can be assumed that they contributed to his improvement. In this instance, the music therapist was working without direction and with a patient who was not in psychotherapy. It seems reasonable to distinguish these accomplishments as therapeutic, and the carrying out of the activity as therapy.

The second therapeutic area, that of direct, controlled procedure under psychiatric supervision, may utilize some of the same techniques employed in the first area. The difference lies in the amount of supervision given, and in the way in which the activity fits into the over-all hospital treatment program. As stated above, the "psychiatric team" concept implies that all professional staff members work together in an integrated program designed to help the patient get well. The following example may serve as an illustration of this procedure.

A Caucasian male, age 17, was brought to the hospital by his mother. He was untidy, sullen, hostile, and occasionally seemed to lose contact with reality. He was given the tentative diagnosis of schizophrenia, paranoid type; the prognosis was guarded. Because it was felt that this patient could not tolerate groups, he was assigned to individual activities in the manual arts shop, the recreation department, occupational therapy, and in the music department. In the music department he expressed a desire to play the trumpet and lessons were begun. After a few weeks, it was found that the strongest relationships he had made were in the recreation and music departments. Consequently, his other activities were cancelled and most of his time was spent in the two departments. Almost daily the patient's doctor would come to the music department to find out how the patient was progressing. The doctor directed the music therapist to give the patient support and gratification whenever possible, and to work toward building his self-esteem. Progress was to be praised realistically, and failure minimized or ignored.

Since the patient had come from a home dominated by his mother and grandmother, he was assigned exclusively to male therapists. After a month, the patient's hostility had diminished
considerably, autistic tendencies were no longer observed, and it was possible to include him in group activities. He was assigned to a patient band, and the recreation department placed him on the basketball team. He received a certain amount of gratification from his band work and trumpet lessons, and a great deal of recognition and gratification from playing basketball.

During this period, he expressed an interest in dixieland jazz. Records were found, and he spent one hour a week with the music therapist listening to records and discussing everything from music to girls. At this time the doctor directed the therapist to begin commenting on the patient's appearance. This led to discussion of clothes, and the patient asked to be accompanied downtown to purchase new clothing. A bath, shave, and new clothing caused considerable comment among the patients and staff members. After approximately four months, the patient was discharged, and seemed to make a good adjustment in the community.

The above example shows some of the events leading to a patient's discharge under an integrated therapy program. During the hospitalization period, a psychiatric social worker made several trips to the patient's home, discussed his illness with the family and was able to convince them that some changes were desirable in the home environment. A psychologist assisted in the original diagnosis, and gave the patient several tests before he left the hospital. Nursing personnel, occupational, recreational, and music therapists knew the patient's medical history, and managed to give him as much support and encouragement as possible under a blanket prescription. The psychiatrist directed the therapeutic team, prescribed appropriate medication, and was responsible for the patient in therapy.

The term "rehabilitation" generally has two meanings. The first refers to the returning or restoring of a person or object to an original state or condition. The second refers to the restoring of one's capacity to make a living. While many hospitals prepare patients to make a living through manual arts training and work assignments, the term "psychiatric rehabilitation" has a somewhat different connotation. It refers to those activities that are aimed specifically toward preparation of the patient to get along socially outside the hospital.

As stated earlier, a patient enters the hospital because of a
disturbance in interpersonal relationships with the people around him. He no longer has the capacity to interact in a satisfactory manner. While therapy is concerned with modifications in the patient's personality, rehabilitation must be concerned with outward behavioral manifestations that might either inhibit or facilitate relationships with people around him. Many psychiatric patients tend to be unprepossessing; they are often untidy, fail to dress appropriately, and pay little attention to hair or fingernails. Some patients have disgusting eating habits, and relatively few know how to dance or play card games.

It is a function, or should be, of the activity therapists to assess each patient's social capabilities and deficiencies; capabilities should be developed and deficiencies corrected. To discharge an untidy patient, for example, would invite readmission. Music therapists work with other activity therapists in all of the areas mentioned above. In addition, they would teach the patient social and square dancing and develop any musical talent that might foster recognition and acceptance for the patient in a group. In the same manner, the recreation therapist would give the patient skills in volleyball, tennis, baseball, badminton and other sports that would prepare him for effective group interaction.

The last part of the definition states that music therapists are concerned with the entertainment of patients. This is an important part of any hospital music program. Activities in this area include patient dances, the utilization and supervision of outside entertainment groups, and entertainment for special programs, such as Christmas shows, etc. The importance of entertainment should not be minimized. It helps to make hospital routine more bearable, and tends to create a better atmosphere which facilitates the more serious business of therapy.

**CONCLUSION**

It is quite likely that the hospital of the future will be changed considerably. It seems that the most influential research at present is being done by group dynamicists. As we learn more about group interaction, this knowledge will probably be applied increasing in the treatment of patients. Another important trend seems to be toward the building of community clinics rather than state hospitals. The clinic offers some obvious advantages. It would be cheaper to build and more centrally located, and the patient could be treated on a part-time basis within the environ-
ment that contributed to his illness. This should reduce the number of out-patient facilities usually attached to the large hospital, and greatly reduce the number of hospital readmissions.

The function of the music therapist in this clinic should not be difficult to visualize. The increased utilization of therapeutic groups, and wider acceptance of rehabilitative techniques should assure the music therapist of a place on the psychiatric team of the future.
THE FUTURE OF PSYCHIATRIC MUSIC THERAPY

CHARLES BRASWELL

INTRODUCTION

Let us assume for a moment that the date is April 27, 1972. After each of us has examined his own state of well being and looked closely at the progress of the cold war, we should then be ready to ask some questions about our profession. What has music therapy accomplished in ten years? What new skills have been learned? What changes have occurred in the treatment of mental patients? If major changes are in evidence, how well did we adapt to them? Is music therapy still an "adjunctive," "activity," "ancillary," or "paramedical" profession; or have we, in some manner, managed to enhance our professional status?

It will be somewhat difficult in April, 1962, to answer these questions. However, it should be possible to explore some of the recent trends in mental health and make a few educated guesses, both as to the future of psychiatric treatment and the possible, if not probable, evolution of music therapy.

The Psychiatric Hospital

Braceland\(^1\) states that three major revolutions have occurred in the history of psychiatry. The first began with the movement towards enlightened hospital psychiatry introduced by Pinel and culminating with Kraepelin. The second was accomplished by Freud and his exploration of the human mind. The third revolution, and perhaps the major one, is in its beginnings now and is being brought about by new discoveries in somatic therapy along with increasing applications of social principles to psychiatry.

It has become increasingly apparent that the large mental hospital, as we know it today, is not an appropriate place to treat mental patients.\(^2\)\(^3\)\(^4\) There is considerable evidence that

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large hospitals\textsuperscript{5, 6, 7} actually contribute to the chronicity of many patients, and that they are "set up to take care of the mentally ill (rather) than the illness itself."\textsuperscript{8} In 1961, the Joint Commission on Mental Illness and Health in a report made to Congress, the Governors, and the Legislatures of the United States, made the following statement:

It is tempting to congratulate ourselves on the gains scored—in increased amounts of money spent for mental health research, in the increases in mental health personnel, in the beneficial effects of new drugs. But the demand for public mental health services is still largely unmet, despite the gains.

One of the most revealing findings of our mental health study is that comparatively few of 277 state hospitals—probably no more than 20 per cent—have participated in innovations designed to make them therapeutic, as contrasted to custodial, institutions. Our information leads us to believe that more than half of the patients in most state hospitals receive no active treatment of any kind designed to improve their mental condition. This is the core problem and unfinished business of mental health.\textsuperscript{9}

Why, after millions of dollars spent on research, new facilities, and educational programs for professional personnel, is the mental health program in the United States so inadequate? Perhaps the answer lies in a trend that became apparent some years ago. With the work of Beers and Dix, Americans exhibited a certain amount of concern for the human rights of mental patients. However, the need to isolate patients from society, to remove the irrational and deviant, was also felt. As a consequence, mental hospitals were generally isolated from the community, gradually becoming larger and more stratified. Knoff states:

The larger a hospital becomes, the more communication (that is, knowing the patients and knowing what is going


\textsuperscript{7} \textit{Action for Mental Health}. A 100,000 word report made to Congress, the Governors, and the Legislature of the United States. Joint Commission on Mental Illness and Health, 1961.

\textsuperscript{8} Wilmer, \textit{op. cit.}

\textsuperscript{9} \textit{Action for Mental Health}, \textit{op. cit.}, 110.
on) is impaired, and the more cautious and apprehensive becomes the attitude of administrative personnel who feel the insecurity of the unknown rather than the relative security of shared communication. Bigness tends to increase the anxiety of staff members who must assume legal responsibility for the behavior of patients committed to their care, and the result is tighter control.  

There is also a considerable amount of concern being shown in the area of patient-hospital relationships. The Joint Commission reports:

... Human beings regard loss of liberty, forcible detention, removal from the community, and imprisonment as punishment for wrongdoing; the mentally ill are no exception. It is generally agreed that the typical locked-ward state hospital, centering its interest on the physical rather than the mental welfare of the patient, increases the patient's disability by reinforcing rather than counteracting public pressure to reject the patient from the community...  

An interesting study reported by Myers and Smith indicates that "smaller hospitals release patients earlier than large ones regardless of whether the staff-patient ratio is high or low."  

**Professional Personnel**

In the United States, there is approximately one psychiatrist for every 18,000 persons. Regionally, the ratio is one for every 11,000 persons in the northeastern section, and one for every 34,000 in the southern section. Ebaugh and Barnes report that in 1959 there were 288 psychiatric residency training programs in the United States. In 1960, the number had increased to 303. In 1960 there were 3,009 psychiatric residents training in institutions, representing an 82 per cent rate of occupancy, compared with 87 per cent for all medical specialties. The number of physicians who are psychiatrists and neurologists, in

comparison with all other medical specialties, “rose from six per cent in 1923 to eight per cent in the mid-1950’s.”

However, comparing these figures with the population growth, it becomes clear that we are not even maintaining our present ratio of one psychiatrist per 18,000 persons. A U.S. Public Health Service officer states that to keep up our present population-to-physician ratio, the output from medical schools would have to be increased by fifty per cent.

Clausen states that there has been considerable competition between mental health programs, mental hospitals, and private practice for the limited number of psychiatrists available, and that due to low salaries and low prestige ratings in the mental hospital, increasing numbers are going into private practice. He further states that this trend is likely to become more pronounced in the future.

Even if all available jobs were filled, the staffing of public mental hospitals would fall far short of the minimum standards for adequate care set by the American Psychiatric Association (these are truly minimum and not optimum or ideal standards). By this criterion, our hospitals are . . . 45 per cent (adequate) for physicians (with heavy reliance on foreign interns and residents).

The situation is more critical for psychiatric nurses and psychiatric social workers, and only slightly better for psychologists.

Public Attitudes

Ridenour reports that in 1958 an opinion poll indicated that the general public is “more willing to be taxed for the care of the mentally ill than for any other major public service.” However, the Joint Commission on Mental Illness states that:

17. Albee, op. cit., 82.
18. Ebaugh and Barnes, op. cit., 653.
21. Ibid.
Several studies of public attitudes have shown a major lack of recognition of mental illness as illness, and a predominant tendency toward rejection of both the mental patient and those who treat him.\textsuperscript{23}

The Commission goes on to state that mental illness has had a "lower reader impact than has heart disease, cancer, or polio."\textsuperscript{24} Voluntary national public contributions to mental health funds ranked eighth (as compared to cancer, heart disease, muscular dystrophy, crippled children, tuberculosis, cerebral palsy and polio) in 1950, and seventh in 1960.\textsuperscript{25}

Kris\textsuperscript{26} states that large numbers of psychiatric patients returning to the community after several years of hospitalization have encountered fear, distrust and prejudice on the part of neighbors, friends, the family, and employers. He further states that these attitudes threaten the "freedom newly gained" by patients.

In a study concerning the views of the American people toward their own mental health, it was found that in the adult population, one out of four admitted to psychological problems needing professional attention at some time in his life. From this group, one out of seven actually sought professional advice. Ten per cent turned to social agencies and marriage clinics, 18 per cent to psychiatrists and psychologists, 29 per cent to physicians, and 42 per cent to clergymen.

It also has been found that general practitioners and members of other non-psychiatric medical specialties tend to be unsympathetic and uninformed when confronted with mental illness.\textsuperscript{27} This may be due to inadequate training in psychology and sociology given pre-medical students. Tyler, in a study of 81 medical schools, found that less than four per cent of students' time, measured in clock hours, is spent in studying the "basic psychological and social sciences."\textsuperscript{28}

\textsuperscript{23} Action for Mental Health, op. cit., 114.
\textsuperscript{24} Ibid., 110
\textsuperscript{25} Ibid.
\textsuperscript{27} Action for Mental Health, op. cit., 114.
\textsuperscript{28} Ebaugh and Barnes, op. cit., 654.
Financial Data

On a national average, about $3.50 to $4.00 a day is spent for the care of each mental patient. In some states, this figure goes below $2.00 a day, but none over $7.00. In comparison, it takes approximately $25.00 to $30.00 a day for each patient in a general hospital, exclusive of medical treatment. In 1960, mental illness ranked second in expenditures, behind cancer, by the National Institutes of Health.

In 1958, mental health research was supported on the national level by several sources. The federal government contributed 57 per cent, the states 20 per cent, pharmaceutical foundations 17 per cent, private foundations and public contributions, less than six per cent.

To summarize these data, we find that there is considerable concern in the medical and paramedical professions, as well as in legislative circles, about the future of the large mental hospital. This institution is described as being, in some cases, actually injurious to the mental health of patients. Reports indicate that there is presently a serious shortage of professional personnel, and that prospects for the future are less than optimistic. Public knowledge about mental illness is inadequate, and public support for mental health programs is unsatisfactory. Financial support, while considerably improved, is still inadequate to meet the needs of a comprehensive mental health program.

The Future of Psychiatric Treatment

Concerning the future of psychiatric treatment, several solutions have been advanced in the literature. These include various types of day-care programs, psychiatric treatment in general hospitals, interim treatment in “half-way” houses and

31. Ibid., 117.
32. Myers and Smith, op. cit., 649.
37. Smith, op. cit., 1384.
"family-care" homes, and the establishment of community psychiatric clinics. Most of these programs have one thing in common, i.e., they operate under the theory that most psychiatric patients, no matter how ill, should not be removed from the community.

Psychiatry in England has traditionally had considerable influence in this country. Several years ago, England pioneered the "open-door" policy that is just now becoming accepted in the United States. In 1957 (operative in 1960) Parliament passed a "Law Relating to Mental Illness and Mental Deficiency" that replaced or partially replaced some 52 previous mental health acts. This law calls for considerable changes in the "management, disposition and treatment of the more serious mentally sick patients." Three aspects of this new program should be of considerable interest. First, there will be a gradual movement of psychiatric services into the community; secondly, local community authorities are to assume more responsibility for mental health programs; and thirdly, emphasis is to be placed on the development of psychiatric units in general hospitals.

Several experimental psychiatric programs in Europe have received considerable attention in this country.

One such program, for Nottingham, England, integrates a variety of mental hospital services with home visits by psychiatrists and social workers, day hospital facilities (for patients who can return to the family home at night)

41. Opler, op. cit., 2247.
42. Myers and Smith, op. cit., 649.
43. Barton and St. John, op. cit., 645.
44. Wilfred Bloomberg. "A Proposal for A Community-Based Hospital as a Branch of a State Hospital." Mental Hospitals, Vol. 10, No. 6, 1959 (June), 23–24.
46. Ibid.
47. Tooth and Brooke, op. cit., 710–713.
and sheltered residential facilities. Even the mental hospital for acutely psychotic patients is run in an open-door policy, with the patients almost entirely voluntary admissions. The hospital is used primarily for short-term episodes in a course of treatment which is based in the home.\textsuperscript{48}

The Nottingham experiment should not be taken as an isolated example. It is common practice in most British hospitals to do a considerable amount of treatment in the community rather than in the hospital itself.\textsuperscript{49}

A radically different type of program has been developed in Amsterdam, Holland.

The plan is based upon ... Querido's premise that the rehabilitation of the mentally ill person can only be accomplished in society itself, and that, consequently, a successful stay in society is the only valid test of any therapeutic endeavor. This implies, of course, that the removal of a mentally ill person from his background must be considered an illogical procedure unless indicated for strictly medical reasons ... There are 22 outpatient treatment centers ... at which the ambulatory patient can receive specialized therapy provided by his group health insurance program ...

The mental health service consists usually of 12 psychiatrists in training, and about 25 social workers. Two psychiatrists and two social workers are assigned to each of the six sectors into which the city has been divided. They work on a rotating 24-hour schedule. From 6 o'clock in the evening until 8 o'clock in the morning, and on weekends, there is one psychiatrist on duty all the time. There are, on an average, about 3,000 adults under supervision, most of whom are living in their own homes and a few in foster homes. The service receives an average of 250 inquiries daily. Some of these can be dealt with by telephone ... Others require a home visit by the psychiatrist and his social worker assistant for more detailed investigation ...

It is, of course, impossible to estimate the total number of hospital beds that have been saved by this service, or the number of hospitals that did not have to be built, or any of the other savings that have been made possible. However, the over-all success of this domiciliary system in Amsterdam as well as in other Dutch cities and communities during the

\textsuperscript{48} Clausen, \textit{op. cit.}, 177.

\textsuperscript{49} A. B. Monro, "British Hospital Reflects Changing Patterns." \textit{Mental Hospitals}, Vol. 10, No. 8, 1959 (October), 21.
30 years of its existence has been such that its principle warrants close study and investigation for eventual application in various American communities. 50

In the United States the number of psychiatric units in general hospitals has been growing steadily. Twenty years ago there were only 48 such units in existence. Today there are approximately 600. 51

Three reasons can be cited for the growth of the community-treatment concept in the United States. The first, of course, has to do with the reported disadvantages of large-hospital treatment. The growing realization that patients progress faster in a community setting has provided the second reason. The third concerns the medical profession as a whole. Traditionally, psychiatry has developed as a specialty outside general medicine, and psychiatrists have tended to isolate themselves and their patients from the community. The suggestion that psychiatry can now rejoin the medical profession in fact as well as in theory has a certain amount of appeal and is likely to receive strong support.

THE FUTURE OF PSYCHIATRIC MUSIC THERAPY

From the foregoing we have seen that institutional psychiatric treatment in the United States is currently in a state of flux. Social psychiatrists have convinced a considerable segment of the psychiatric profession that the large mental hospital, as we know it today, is not an appropriate place to treat patients. Suggestions for changes in our institutional structures are becoming more widespread. In this age of technology in which we live, rapid changes in any profession are not only possible, but likely. For these reasons it seems entirely probable that within the next ten years a drastic reorganization of institutional psychiatric treatment will have occurred.

Now, and not ten years from now, is the time to ask the question: what role will the music therapist assume in the hospital or clinic of the future? What can he offer the psychiatric patient in a general hospital or community clinic? While it would be difficult at this time to give an adequate answer, one comment can be made. Considering present skills, music therapists have no place in the acute treatment centers of the future. Therefore, it is

imperative that new techniques and skills be learned now, so that well-defined services can be offered when the need arises.

A study by Loeb shows that the activity therapist occupies a relatively low position in the status hierarchy of the average mental hospital. He is ranked after the psychiatrist, the psychologist, the social worker, and the psychiatric nurse. It must be admitted that there is some justice in this ranking, both in fact and in services provided for the patient. Music therapists have depended almost entirely upon a knowledge of music (often rudimentary) and a superficial knowledge of psychodynamics in order to work with patients. Techniques used are the same ones developed by musicians without special training after World Wars I and II. The job that most music therapists do in hospitals does not take four years of college training to accomplish. Almost any moderately-trained musician can fill the same job specification.

If the application of milieu therapy to the state hospital had worked in fact rather than in theory, the situation would be somewhat different. However, low staff-to-patient ratios have forced most hospitals to give lip-service to the milieu concept and, by necessity, offer mostly custodial care.

What may be done about this? First, the perennial recommendation of "research" must be restated. It has been apparent for some time that music can serve admirably as a stimulus and catalyst in group interaction. It is likely that this will be music therapy's technique of the future. This means that research in group phenomena should supplant investigation being done in experimental aesthetics. Twenty-five centuries of study in the area of aesthetics has had but meager yields. Perhaps the tenacious dream of music as a universal specific should be allowed to expire gracefully.

The second area of preparation for the future should consist of a close look at the educational curricula in music therapy. It is realized that the following statements might be somewhat controversial, but some controversy might be necessary for progress. The present undergraduate curriculum does, to some extent, give fair preparation to the student expecting to work in the psychiatric

hospital, but it should be changed considerably. For example, a majority of music therapists spend most of their time working with various types of groups. However, sociology, the field concerned with group phenomena, occupies a poor third place (after music and psychology) in our curriculum. Would it not be much wiser to let our students take general and abnormal psychology, and spend the remaining hours learning the properties of groups and how to work with them? Also, by the time course requirements from the National Association for Music Therapy, the university accrediting agencies, and those peculiar to the university itself are met, most curricula are seriously overcrowded. This problem could be met in two ways. First, divorce music therapy from music education and place it under the bachelor of music or bachelor of science program. This would save several hours in educational methods courses. Secondly, make a five-year professional course in music therapy mandatory. This would not be such a drastic step as many undergraduate departments now operate under a five-year plan. This would give the student more time to develop instrumental or vocal proficiency, and also allow time for more group-centered courses.

The new graduate curriculum recently adopted by the National Association for Music Therapy has a certain elegance and finesse. However, it must be stated that it does nothing but meet existing needs. One major area in this curriculum is devoted to administration. It is entirely likely that the activity therapy department of the large mental hospital will be a thing of the past in ten years; or, if not, it will deal largely with chronic patients. Therefore, students are, very likely, being prepared for a vanishing occupation.

The second alternate in this curriculum has to do with research. This is, of course, extremely important. However, the curriculum is based on experimental psychology, and the techniques learned will deal largely with the individual. A well-known textbook for experimental psychology includes these chapters: "Memory, Retention, Memory for Form, The Conditioned Response, Maze Learning, Practice and Skill, Transfer of Training," etc.53 These areas do not suit the needs of music therapists doing research. The skills learned should be those of group research, and the

statistical methods taught should be sociological statistics, not psychological. Research techniques having to do with small groups, such as those developed by Bales, should be given serious attention.

It will be noted that recommendations in this paper point toward the study of group phenomena. This direction is indicated for several reasons. First, music therapists have depended for status upon the "treatment-team" concept. It has been demonstrated that this concept is based upon the application of milieu therapy to the state hospital, and that this has not worked, nor is it likely to do so in the future. Therefore, music therapy's status symbol exists in fantasy rather than fact. Secondly, those who have studied the history of medicine realize that physicians have been noted for their conservatism. In other words, the prerogatives of the psychiatrist are not likely to be relegated to non-medical personnel. Therefore, it should not be expected that music therapists will eventually be allowed to practice individual psychotherapy. This then leads to the question, what standard, accepted form of psychiatric treatment is most often practiced by non-medical personnel? The answer, of course, is group psychotherapy, which is often done by the social worker or psychologist. With appropriate training during a five-year undergraduate period, group psychotherapy could be studied as the culmination to graduate or post-graduate training. It is also entirely possible that some effective variations utilizing music could be developed.

What are the prospects for realizing the goals mentioned in this paper? Frankly, they do not appear to be good. The music therapist without university training will fear that these suggestions, if adopted, will place him in an inferior professional position; the university-trained therapist will realize that his former training is inadequate for the new role. The music therapy educator will probably not feel competent to deal with students trained in group rather than individual techniques. However, something must be done. Practically all of the authors consulted in writing this paper were psychiatrists. Neither music nor recreational therapy was mentioned once. Occupational therapy was given cursory treatment in one article. We must take a close, non-defensive look at our profession now while there is still time. Ten years from now will be much too late.
PART III
MUSIC THERAPY IN
INSTITUTIONS
A COUNTY HOSPITAL BLAZES A TRAIL

MYRTLE FISH THOMPSON

An unusual venture in the use of the arts in its rehabilitation program has been developed during the last dozen years at the Essex County Overbrook Hospital. Particular emphasis is placed on the creative aspects of participation in music, dance, drama, and the visual arts activities, painting and sculpture. This is an autonomous department, answerable directly to the Superintendent and Clinical Director, with formal structure, Civil Service status, and approved title and job specification.

Out of an earlier Music Therapy Department initiated in 1948 there developed a spread to inclusion of other art forms in 1956 and 1957. While music continues to be the larger part of this newer program, and to permeate the hospital with sound and with service of diversional nature, its therapeutic values are of first concern. The latter approach is similarly applied to the other art media now used. All these activities are structured to stimulate interest, help improve concentration and coordination, build feelings of self-worth, and challenge initiative and self-expression. Easier sociability, adjustments to the disciplines which the group or the activity demand, and improved attitudes are potential healthy by-products. Something to think about, and do, with time, rather than dwelling too much on personal problems and deemed injustices; something to get up for in the inevitable new day, rather than marking time in inactivity and resentment. These are antidotes to feelings of hostility toward the hospital or other patients, and to feelings of rejection by family or of exclusion from what is going on in the world outside.

Such values and goals are shared by all constructive occupations in a rehabilitation program. But in addition the arts offer unique opportunity to experience, either alone, or to share in an experience of beauty with others, without feelings of self-consciousness. They allow one to know the joy of being uplifted, or deeply moved by artistic expression, whatever the art form. Or if the field is popular music, modern dance, or some extreme of contemporary visual art they may result in “being sent” by the experience, as the vernacular has it. Whether one only touches the fringes of aesthetics as listener or observer, or moves more deeply into a reaction through personal participation, there
are tremendous potentials in these tools for therapy, which, only now, are beginning to be utilized. At the least, under the safe term self-expression, they are sublimations permitted by society. At best, they bring recognition within the hospital community, as well as satisfaction to the “doer” regardless of the artistic evaluation of his product. For artist or amateur, they satisfy the somewhat nebulously understood but vital human urge toward creative expression.

Another powerful aspect of the arts is in their ability to communicate meaning without need of words. We share in the end results of creativity because not only is there in us the innate yearning for expression, but a need for sharing our feelings with others. As we want other eyes, ears, and minds open to what we are meaning, so we are drawn to acknowledgment and appreciation of what others are feeling and meaning. We can share this emotional empathy in spite of language barriers and political and philosophical differences, as witness the good-will aspects of international tours by musicians, actors, and dancers, and the interest-provoking exchange of paintings, sculpture, and musical composition. If we can credit the press with accurate reporting, improved communication and better understanding come out of such artistic exchanges even when bitter controversy exists in ideologies.

Considering their powerful force for aiding self-expression and communication, it is not strange that therapy is now welcoming an ever-broadening use of the arts. Rather, it is strange that their professional use as ancillary tools has been so long delayed. That this is so is no more the fault of medicine, which must insist on validation, than of the arts themselves, which—aware of their own strengths and values—have been late in perfecting suitable techniques.

Some of the present broad development of arts in rehabilitation situations have grown out of the wars in which the United States has been involved in the twentieth century. Each of these has brought on new waves of enthusiasm for carrying entertainment and participation in cultural activities to servicemen. Perhaps because music, even when not the main program content, has served importantly in a supportive or accompaniment role to drama and dance, it became the most-used of the art forms and the first of these to attain professional status in the therapy field.
But others are following fast on this trail. A magazine is now published called *Art Therapy*. Photographs and stories about art studies in hospitals are beginning to appear in magazines. The press brings increasing reports of dance therapy, and of plays written and produced by patients. The arts are on the march. And one of the broadest programs, which has not only been permitted but encouraged to develop, is at a County hospital, in one of the States, small in size but large in cultural appreciation. Some comment should be made on the title of Overbrook’s Department of Music and Creative Art Therapies. Why is music singled out for special mention? Is that not redundant? Does it not favor one activity above another? This especially needs explanation in the light of Superintendent Henry A. Davidson’s being a nationally recognized authority in the realm of words. The title does present semantic contradictions since music itself is a creative art. The explanation stems from three facts: first, that this was previously a Music Therapy Department for several years; second, that music activities still make up the larger part of the program; and third, because music is the only one of the arts which has established itself with professional recognition in the therapy field. This is partly due to there being an active national organization (The National Association for Music Therapy, Inc.), which publishes a quarterly magazine and an annual yearbook, both widely disseminated; also because there is now professional registration of music therapists (RMT—Registered Music Therapist); and finally, because the academic goal of a baccalaureate degree in Music Therapy has been realized (BMT—Bachelor of Music Therapy, or BM—Bachelor of Music, or BME—Bachelor of Music Education, the latter two with majors in Music Therapy).

Overbrook Hospital has further identification with national developments in music therapy. In 1950, in New York City, when the music therapy association was formed the then-incumbent superintendent of Overbrook, Dr. Samuel W. Hamilton, was the keynote speaker for therapeutic uses of music at a national convention of music teachers. But not only in its founding, but in subsequent years, Overbrook Hospital is one of the hospitals which has remained in the forefront of recognition in this field. It has reflected the growth of the national movement in its own support of a rapidly growing music therapy program, and also
initiated one of the earliest clinical training centers in the country.

Let us now proceed to consider a few “why’s” which may present themselves as questions when a program such as this is evaluated. Why did music, in therapy, grow more rapidly than the other arts? There are several reasons. Functionally, one simple answer is because most hospitals use some form of music, whether labeled a therapy tool or not. This may be only for church services; it may be only for “jam” sessions. It may be to satisfy the urge of a few talented patients to perform; or it may be used only for large groups, where, with little emphasis on skill, but much on release, many patients can be involved in participation. It may be for parties; it may for dances—a band, an orchestra, choral groups, or elaborate shows. Or where there are few music facilities, community volunteers, entertaining on the wards, may represent the major part of a program. In almost every institution radios may be found, and, more recently, TV sets, and usually there will be a record player and a few—or many—records. Listeners, performers, learners; classical and popular music; instrumental and vocal; individual and group—so runs the broad gamut of uses. As with the public, so with our patients; there is the same catholicity of taste and spread of interest. In essence, a busy music therapy department in any hospital where there is long-term care may find itself running an entertainment bureau, as well as a music school, to say nothing of serving in the “ministry of music,” which is the new terminology for music used with religious services.

These are functional reasons for the “why” of the usefulness of music in hospitals. But psychologists and musicians know there are other stronger though less tangible reasons than these which relate to the psychological and emotional reactions of people to the elements of music itself. Civilizations long before ours have used its powerful elements of rhythm and volume changes to incite or to tranquilize, and its softly persuasive potentials of melody, and associative content, to play on feelings and to influence moods. Educators have know how to use the disciplinary values, and the stimulus toward achievement, of music study with professional performance goals. Gifted amateurs know the joys of performance. The phrase “music is a universal language” cannot be judged to be outmoded when the usefulness of music for non-verbal communication and self-satisfaction has been, and con-
In Institutions

continues to be, recognized by so many cultures. This is particularly true of its limitless reaches in our present age of recording and broadcasting, touching not only the many who perform but the countless thousands who prefer to serve as listeners and reactors. The enormity of the uses of music and of their impact on our society is reflected not only in this mass use of records, radio, and TV, but by the astonishing growth of community concerts by touring and/or locally trained units, which permeate not only urban but rural areas throughout the country. Again, there is one national organization of music teachers which numbers half a million members, and there are other contenders, in numbers of members and in extent of community service and professional recognition. The tremendous size of marching bands in Mid- and Far-Western colleges are matched only by the ubiquitous city-supported symphony or opera groups in what is known as the "grass roots" development of American music. Such a growth was bound to be directed, in time, to exploration of the specific uses for therapy of an activity used so universally for its general therapeutic effect.

The second "why" is why, more recently, the expansion into other arts, and why the particular art forms chosen? This was a natural development which grew out of such music projects as shows, skits, and special entertainments which most hospitals feature seasonally. These utilized artistic talents other than musical, and afforded satisfaction and recognition to the patients involved. Scenery, posters, program illustration, and costume design put patients to work sketching and painting, but only as needed on special occasions. Now these stimulating projects are one part, only, of the total art work carried on in daily painting classes. In the same way theatrical props, which formerly presented occasional demands on the ingenuity of a few people who worked easily with their hands, are now special occasional projects of groups who work regularly in the sculpture room with clay and plaster in a daily climate of creativity. Here the work of one often inspires another, artistically, or leads to conversation and discussions of mutual interest. The work is three-dimensional application of flat-plane pictures, or copies of other sculpture, or sometimes purely creative concepts. The latter are not infrequent, and are particularly revealing in their implications. Many of these are abstract or impressionistic in style. Molds and forms are not
used except for preserving individual designs. Ceramics are avoided since this is already a thriving activity in the Occupational Therapy Department.

Although a great deal of the art work, both in painting and sculpturing classes, consists of copying other art, the choice of what pictures or objects to copy is the individual's, and how he does it is peculiarly and satisfyingly his own. Life-models, often chosen by the patients, are sometimes used, or still-life compositions which may be arranged by patients or staff. Six people painting or sculpturing the same composition will each say something different. Guidance and instruction are available but only proffered, not urged. When weather permits, those wishing to paint outdoors may choose their own subjects. Semi-annual exhibits are open to patients, families, and community, one of these on the grounds in the summer.

With even greater ease the bridge from uses of music to uses of dance forms and dramatics in the program presented no problem. From occasional use in past performance projects, to carrying these on the regular schedule was a simple transition. Also since these activities encourage socialization, self-expression, and feelings of security, they inevitably earn support in a rehabilitation framework. Some activities are less glamorous and less dynamic than others, but all are tried, and each has its following. Daily relaxation exercises to music now start off the day for all patients in the program, whatever their special interest, unless contraindicated for physical or behavioral reasons. Weekly or biweekly formal dance instruction increases social ease. Folk dancing breaks down barriers, and is invigorating. Modern creative dance groups stimulate imagination and release emotional tensions in a socially acceptable way. The dynamic techniques of "dance therapy" are restricted to the times a leader is available who is skilled in relating dance movements to body awareness and to feelings of self-worth, and equally skilled in handling personal relationships and psychiatric implications.

Formerly dramatics and play-acting occurred only during the preparation of a skit or show. Now groups meet daily to explore words, sounds, and special techniques of vocal and emotional production and control. Patients are encouraged to improvise, act out feelings, or create emotional reactions which they then discuss for better self-understanding. Or, they may use excerpts
from play-reading material, or poetry, for esthetic enjoyment only, or for improving speech or communicating ideas.

Usually patients of like character are grouped together. For example there are, daily, a receptive alert class; a slower more reserved, somewhat self-conscious group; and a young adolescent "problem" group. The latter group has an over-abundance of energy which needs direction, and unconsciously is seeking ways of accepting discipline without losing status. These young people need recognition and they accept guidance only if it is not forced upon them. With this kind of group all the art forms may be used, and the leader may end up more exhausted than the class. The slower-moving, older class may sometimes use written material which is not too threatening in its demands or content. The alert older group welcomes more difficult assignments, and these people find enjoyment in memorizing, play-acting, improvising, and working without script. Occasionally this group puts on a short play with costumes and scenery, or even writes one. One complete two-hour show at Overbrook was largely original music and lyrics by patients and personnel (The Creative Urge, 1958).

By being able to offer so many different ways of self-expression a department of combined arts can allow concentration in one form, but yet offer a healthy spread of interests. This parallels the choices met outside the hospital, and bridges the gap from what one may have done in the past—or wishes one had—to what he may do—or thinks he will want to do—in the future. This is not meant vocationally, but avocationally, which also parallels cultural developments in the community to which he will return. It opens new vistas to the patient for knowing the world of arts and for trying his own capacities. While there are always the few who hold back and remain peripheral, they still function passively, and some may gradually move into at least nominal participation. But for the many, the demands on initiative and creativity make the total program challenging and rewarding in a more positive way.

The inter-involvement of the various sections in special joint projects makes for excellent morale through group achievement. The daily free moving from one activity to another, and applying oneself in each, make for easier adjustment to work habits through learning to use leisure time constructively. A patient plans his practice period on an instrument or his time in the sculpturing
room, for example, to leave him free for the group activity or other activities he favors. Having these activities near each other, and on a coordinated schedule, offers patients constant exposure to new interests, which in turn conditions him to the pace outside. It also is helpful to the staff in minimizing problems of escort and supervision for patients who cannot come alone and are assigned to longer periods of time in the Department than would be justified if fewer activities were available. Those with privilege cards may sign themselves in for one or more specific activities and leave under their own initiative for job assignments, ward work, other activity departments, or just to get outdoors for a change.

Unless a patient is absorbed to a healthy degree in some one activity, or has shown a marked spread of interests, we prefer to see him assigned part-time to another department. While certain seasonal pressures necessitate unusual time and energy demands occasionally, the general policy of the Department is to synchronize activities so patients both work and play and have variety and choice, thus approximating conditions they will meet later. Emphasis also is placed on having as attractive quarters and furnishings as is practicable, and on approximating normal outside conditions in avocational applications of the arts.

Next of the “why’s”—why a separate department? What advantages are there in this organization as compared to over channelling through a Recreational or Occupational Therapy Department as is done in some State or Federal systems? None, if a parent control can allow free rein to a specialized art form, or knows it well enough to evaluate all the potentials and how to use them. But it is rarely the case that a teacher in the art fields, or a professional artist, has not started his specialty training early in life, and therefore will not have taken four or five years out of his training time for a general basic course in the activity therapies. Rather, his therapeutic training is likely to be superimposed on his art specialty, often because of conviction that the latter has uses for improving health in mind or body. Or at the college level he has either seen the suitability of his special talent for work in therapy, or is drawn by strong personal drives towards work with people and so has combined the two in his baccalaureate training. Those who work at less specialized skill levels find it difficult, even with their fine academic training in dynamics and psychological implications, to use the art forms as freely as the professional.
Actually, allowing freedom to the several arts to be creative, and exploring all the forms of expression unique to each, stimulates and satisfies both the therapist and the patient. Without these approaches the activity may easily become static and sterile. The driving force of the therapist's special talent and obvious satisfaction in it will capture the interest of the patient, and perhaps touch off a kindred spark. At least the patient gains a glimpse, and perhaps a growing appreciation, of the feeling conveyed.

It seems obvious that one cannot draw clear-cut lines between what aspect of an activity is recreational, what is uniquely educational, and what is so-called occupational therapy. Study in any art form belongs in the area of education, but it often is also an absorbingly healthy occupation, and certainly it is diversion to many. Who can say that recreational projects in music, or dancing, or dramatic activities, or painting or sculpture, are not equally good occupational therapy, and in many ways educational therapy as well? All have similar goals which each of the arts in therapy shares: they stimulate interest and imagination, encourage application, and use energy productively.

The criterion for judging the efficacy of any organizational structure is in practicability. Does it work? By being a separate unit it was possible for the Music Therapy Department at Overbrook Hospital to freely explore many uses of music. When functional uses of allied art forms in the Department activities focused attention on their potential usefulness for patients, it was an easy matter, with Administrative support, to apply the same empirical procedures and absorb them in one over-all creative arts program.

All this costs money—and money is needed for many different kinds of things in hospitals. "Why" then this icing-on-the-cake when there is always bread to be bought? One very practical reason is that there are special funds ear-marked for patient welfare and recreation on which routine running expenses and supplies for this kind of leisure-time activities could call. But any activity program must prove its justification beyond that point, for the taxpayer rightly demands reasonable return in public welfare on any further investment. The modern philosophy of patient care now extends a hand: a hospital must be concerned not only with health but with human happiness. Mankind has three basic needs—to be busy, to belong, to be loved. An indi-
vidual feels his best when doing his best not only in his job but in his leisure time. Fortified with this argument, a creative arts program can feel assured that it will be one of the trimmings which is a sound investment in good health, and can reassure the Administration that it will bring equally sound returns in good public relations.

Why this development in a hospital in Essex County? Why here rather than in many another County or State hospital? Because it is a County small in size but large in population and in civic pride. It is urban, suburban, and rural. There is a wide gamut of tastes and interests, but talent knows no one section nor class distinction. Citizens have faith in their hospital and they do not hesitate to use it when in need. It is a County of wealth, yet with many poor persons. It is a County of many opportunities and with many cultural activities for all kinds of groups—as with the County, so with our patients. The soil was ripe for such a department.

The nurturing since has been continuous. Hard work, yes; imagination, organization, and many times, courage. All these were needed. But without administrative and medical support this development could not have been realized. The doctors, through their ever increasing referrals and their accessibility to contact for advice, have been very helpful. Unstinting support and interest have been given from the beginning by Governing Boards of Freeholders, who although changing in personnel from time to time have remained steadfastly dedicated to providing as many advantages for “the good life” for patients, as sound principles of management allow.

To three superintendents—two during the music therapy period, this Department is deeply indebted for the opportunity and privilege their support has made possible. Dr. Samuel W. Hamilton under whose endorsement the Music Therapy Department was begun in 1948 considered music a powerful tool to bolster the patient’s native drive toward health. He “dreamed dreams” and brought to fruition many kinds of privileges for his patients, among them music therapy. He sponsored three famous P’s for patients: Privileges, fresh Paint (preferably in pastels), and Pie once-a-week. His interest in Music Therapy stemmed from an earlier association, while in National Mental Hygiene, with Dr. Willem van de Wall’s studies on the uses of music in Correctional Institutions.
Dr. Joseph G. Sutton, who followed Dr. Hamilton in 1950, was interested in all expressive art forms. After some initial skepticism as to the value of such a program, he became a staunch advocate of the wide uses of music at Overbrook and laid the groundwork for later expansion to the other arts.

Dr. Henry A. Davidson, previously Assistant Superintendent, and since 1956 Superintendent, is outstanding in alertness to all advances in contemporary treatment. He is nationally known for his fearlessness, resourcefulness, and open-mindedness. The keenness of his imagination makes him quick to see new possibilities, and receptive to new ideas.

Without these three men there might well have been frustration and failure. No job can be done in any activity field unless three requisites are made available: adequate place to work, adequate equipment to work with, and adequate personnel to implement a program. They have supplied these three basic needs generously through the years and have watched with interest new developments. With such support there is no excuse for a good job not being done.

Now we must look to the future to verify principles and improve techniques. We must pay greater attention to work with individual patients if we are to realize the true therapeutic potentials of the arts. This is hard to do while covering so much ground diversionally for the institution. Yet it is fair that a hospital which supports such a department should feel free to call on it for its specialties. In spite of these demands and the need for reaching more superficially large numbers of patients (both of which make for general good will and a pleasant institutional climate), and in spite of increasingly large case loads and the grinding necessity for paper work in administration, we must not lose sight of the main goal. Patient’s problems, tendencies, and progress must be reported on and discussed with other therapists so that approaches and goals are uniform.

Workers must be sought who are well balanced and eager to continue to learn; who are honest with patients and with themselves; who feel respect for patients as people and sympathize with their problems, but who can keep from becoming emotionally involved; who have buoyancy of spirit, but composure in manner.

Professional writing, sharing experiences and techniques, keeping up with developments in one’s own and in allied fields, help-
ing establish and hold to high standards of training, using pilot studies to serve toward finding answers rather than inflexibly holding back to "wait on" answers from others—these are the many ways in which therapists can increase their effectiveness in the arts.
MUSIC THERAPY IN A MAXIMUM SECURITY SETTING

WILMER E. LEHMAN

The security division to be reported in this paper has a census of approximately 500 male patients and is part of the larger civil mental hospital at Westville, Indiana, which has a census of 1650 men, women, and children, and serves the 17 northern counties of the State.

The Maximum Security Unit is built in the form of a figure eight—a two-story modern building enclosing two courtyards which spread over four and one-half acres. It is joined to the Civil Division physically by an auditorium and a gymnasium.

The external security of the Maximum Security Division is provided by a fourteen-foot playground-type fence with a two foot overhang and mercury-vapor floodlights at fifty to seventy-five foot intervals. There are no guard towers, solid walls, foot or motor patrols, or observation towers. The psychiatric aides working with the patients have no physical safeguards. They do not carry clubs or guns. All they have is their knowledge of the handling of mental patients and their own individual initiative in controlling disturbances.

Internal security is maintained by the aides being locked in the wards without keys as each shift comes on duty. The principle of compartmentalization is carried out so that it is impossible for any patient to progress to the outside from within the building without going through five to eleven locked doors.

The ward arrangement, within the Maximum Security Division, is almost identical to that in the Civil Section and to that in many other psychiatric hospitals. There is a large day room, sleeping dormitories, rest room facilities, and, of course, the nursing or aide station. There are single special care rooms complete with the latest security devices which are used for the deliberately destructive or assaultive patient.

The Maximum Security Division, which serves the entire State of Indiana, first opened its doors on February 22, 1954. During that first year there were 319 patients admitted. The majority of these patients came from the Indiana Hospital for Insane Criminals. In addition, the various civil mental hospitals throughout the State sought to transfer their more troublesome patients to the new Institution. At the present time the population of the Maxi-
The Maximum Security Division is in the neighborhood of 500 patients. Of these patients approximately 31 per cent are court controlled, 50 per cent are from penal institutions, and the remaining 19 per cent are from civil mental hospitals. From these statistics one can see that we have a group of men who represent almost every type of mental illness, almost every type of crime, almost every type of problem imaginable. We have men who became ill while being incarcerated in a penal institution. We have men who have been adjudged ill at the time of the commission of a crime and have been committed to the Maximum Security Division because it was felt that there was a high probability that they would commit crimes again if released. We have men who have been such behavior problems at other civil mental hospitals that it was felt that they should be put into a more secure environment. And these are not all grown men. There are teenagers and even children no older than ten years represented in this all male population.

Now with this type of environment and type of patient, we face problems which are not ordinarily found in a civil hospital.

First of all we have the problem of security. I’m sure that in most hospitals there is no special problem involved in going from ward to ward to conduct various activities; nor, I imagine, is there any problem in getting patients for group work such as choirs, orchestras, etc. In the Maximum Security Division, however, this is a very real problem because you cannot take records and a phonograph and go to any ward at any time. You must be escorted to all areas because this is the only way you can get in. We have, in the Maximum Security Division, men designated as “runners.” These men have sole responsibility for escorting both patients and personnel to any and all activities and areas. If these men happen to be busy when you are scheduled to go on a ward or to some other area, you have no alternative except to wait, and this can be rather frustrating when you have a full schedule.

Another very serious and fundamental problem which we have is the motivation of the patient. I speak of motivation not in the sense of getting patients to participate in music therapy activities or any other activity because these patients do participate. They participate more readily and with more enthusiasm than the majority of civil patients. These men will practice long and hard to learn to play an instrument, and many times it amazes one to see
how rapidly they learn to read and play music. And they learn to play well. The motivation I am speaking of is motivation to live, motivation to lead a useful productive life, the motivation to get out of the Maximum Security Unit. The problem lies in the fact that many of these men have very little to look forward to. Because of the very nature of the Maximum Security Unit and the type of patient we have, there are very, very few men discharged to go back to society. The majority of these people are sent back to other civil mental hospitals. With this type of situation you can see that there are many problems because these men simply don't want to go back to prison or to the hospitals from which they came. These men say, in effect, "Why should I want to get out of here and go back to prison. I have more freedom here, there are more things to do, I don't have to work as hard, why should I want to leave. I'll just behave myself and cooperate with the people in charge and stay right here in this comfortable little world." When a man has nothing to look forward to except many years, and perhaps the rest of his life, in prison, it's rather difficult to convince him that there is any merit in improving himself.

Another problem which makes these men extremely difficult to work with, in many cases, is what I call the "penal code of silence." As mentioned before, fifty per cent of these patients have been admitted to the Maximum Security Division from penal institutions. These men, somewhere along the line, have developed such a basic hatred and distrust of anyone and anything which represents authority that they simply do not relate or communicate except on a very superficial level. They say in effect, "I'll do what you tell me to do; I may even talk to you but never about myself or anything that is important to me; and above all don't expect me to trust you because you represent someone who can get me in trouble if I say too much." With these men you have to be very fair, you have to be very patient, you have to be very careful about what you say and do, and you have to know the answers. You have to know the answers because if you don't these men will pick it up very quickly and classify you as a "dummy"—someone not to be trusted, someone to be used.

Considering these rather unique problems that we face in the Maximum Security Division, it would seem that our music therapy program would have to differ greatly from that used in
a civil hospital. But this is not the case. The music therapy program which we carry on in the Maximum Security Unit is of exactly the same nature as that which we use in the Civil Section. We have to make some allowance in scheduling and programming to compensate for the security measures which are involved; but we are striving for exactly the same results and we go about obtaining these results in the same way we do in other settings.

Briefly, our activities in the Maximum Security Unit consist of three types: (1) large group activities, (2) small group activities, and (3) individual work. To be a little more specific, our large groups consist of ward work or programs. In this type of program we use a record player and records, live music by different patient groups, and combinations of the two. Our small group activities consist of orchestras, choirs, choruses, quartets, etc. The individual work, of course, consists of lessons given by the therapist. In addition to these we have a program of music with electro convulsive therapy, the use of patient bands to play for parties, a Protestant choir which performs for Sunday Services and several special programs during the year.

These are some of the problems we face; this is the content of our music therapy program. Now let's take a look at the type of individual it takes to work in this kind of situation. First of all, he must be a well adjusted individual who is very sure of himself and his feelings. Remember that he is working in an all male situation, behind locked doors, and the resulting problems and pressures can be terrific! Secondly, he must be a very patient individual and one who is very accepting of anything a patient says and does. He must be this way because these patients are so distrustful and guarded that they test you again, and again, and again, in all conceivable situations before they are going to begin to accept and trust you. And it may take one of these men six months or a year before he decides that you are all right. Third, this therapist must have an extreme sense of dedication, and a strong belief in people and the job he is doing. When you come right down to it, these things are no more than we would expect from any therapist. Yet, I think they must be present to a higher degree in a therapist who works in a maximum security setting. He has to have these things because he is constantly under very close surveillance by the patients. These men make a point of getting to know anyone who works with them very well. And they
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watch every move you make; because if they watch long enough they may find some way they can use you to their advantage.

Now that I have outlined, briefly, the physical arrangement, the unique problems, types of patients, and the demands made upon the therapist, let's try to see just where music therapy as a profession and discipline fits into the treatment program in the maximum security setting and at some of the things we hope to see in the future.

Since the Maximum Security Unit was opened in 1954 the music therapy program has been a rather hit-and-miss affair all too often. It has been this way because administrative policy has demanded that only male therapists work there, and many times we just haven't had the men to put over there. We have always had someone there, part time at least, but it's rather difficult to accomplish much when the therapist is there only three or four hours a week. In January of 1960, however, we were able to assign to the Maximum Security Unit a full-time music therapist. At first he met quite a bit of resistance, especially with ward work; mainly, I think, because the other personnel simply were not used to having a full-time music therapist around. Since that time he has developed a music therapy program which, in my estimation, is one of the finest I have ever seen. He has through patience, dedication, and hard work, developed a rapport and working relationship with these patients which is based on mutual respect. He takes an active part in staff activities and his ideas and opinions are sought and respected.

There are several things we would like to see happen in the future. We hope that someday we will be able to use female as well as male therapists in the Maximum Security Unit. We want to see this happen because we feel this is one more way of saying to the patient: we want to help you, we think that you are worth while, we trust you and we think that there is no reason why you should be segregated from all female contacts. Another thing we would like to see develop is some type of interaction between civil and maximum security patients. We are, at the present time, working out plans for our dance band to play for civil dances occasionally. We would like to see a combination of the civil and maximum security bands, rehearsing and performing together. We would like to see the time when it will be possible to work with any patient in the unit, regardless of his security rating or his condition.
These are some of the things we hope to see in the future. We have accomplished much up to this date. Despite the problems I have mentioned; despite all the things about a Maximum Security Unit which make it a difficult place in which to work; we have developed a very strong activity therapy program which includes Recreation, Occupational Therapy, Industrial Rehabilitation and, of course, Music Therapy.

We are slowly working toward the goals mentioned above, and we are confident that the ongoing program in the Maximum Security Unit will continue to expand and progress.

In conclusion, the music therapy program in a maximum security setting resembles very closely the program which each of you carry on from day to day. It is this way because we do not feel that the patients in the maximum security setting are any different than any other patient. They are sick people who have, by some quirk, stepped outside the code of the law and have been termed “criminal.” But we do not think of them as criminals. We think of them as individuals who need our help; who desperately need our understanding, acceptance, and love so that they may begin to rebuild their lives on an understanding of themselves and, in the future, take their place as useful, productive citizens in our society. We are happy to have a strong and integral part in a program striving for this goal.
PART IV
MUSIC THERAPY WITH SPECIFIC SYNDROMES
Music therapy as a modern rehabilitation modality has received marked impetus and development since World War II. It joins hands with physical medicine and rehabilitation on the one side and recreational therapy on the other, and draws sustenance from the methods of music education.

Music therapy is employed in a wide variety of settings and with many types of patients: in general hospitals and specialized hospitals such as those for mental, tuberculosis, and cancer patients; in clinics, schools, prisons, nursing homes; with children, adults, the mentally retarded, the handicapped, and the aged. There are now at least twelve degree-granting higher educational programs for training in music therapy, and by conservative estimate at least seven hundred music therapists are now substantially engaged in rehabilitation settings and institutions.

Full elucidation of the technical aspects of psychological and rehabilitation applications of music to mental patients lies beyond the scope of this presentation. But briefly, these applications include group and individual sessions with patients on a continuing basis, often under a physician’s or psychiatrist’s prescription, for such purposes as dispelling discouragement or anxiety, alleviating hostility, improving certain types of muscular control or socialization, and opening a way to self-expression. Music may be adjuvant to other therapeutic endeavors, as when employed to alleviate fear of electroconvulsive therapy, or to introduce the patient to the discussion of personality dynamics first centered upon the lives of composers and later transferred to more personal self-exploration and discussion.

Music as entertainment—auditorium performances, word programs, and vocal or instrumental appearances before patients—also has a rehabilitative purpose. It may raise the patient’s interest in his environment, alleviate boredom, maintain his contact

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*1 Reprinted from the September-October 1961 Journal of Rehabilitation, official publication of the National Rehabilitation Association.*

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with the world of normality, and open the line of communication back into the ordinary world outside the hospital.

"Rehabilitation" requires a broad definition insofar as it pertains to mental illness, and particularly to the schizophrenic psychoses, which by nature are long-term conditions requiring extended hospitalization. Rehabilitation does not necessarily mean recovery to the point of discharge or to the point of social and economic self-sufficiency; rehabilitation can also mean the deceleration of that deterioration of personality that occurs when hospitalization goes on and on through the months and years.

CASE HISTORY

One case history that might be cited is that of Ed, a World War II naval gun pointer aboard a light cruiser. When first seen in a hospital he showed profound startle reactions with episodes of screaming. That was seven years ago. Today, Ed sometimes smiles, and though often withdrawn and sullen with others, he talks about his music with the therapist and unfailingly thanks him at the conclusion of the music lesson.

Ed grew up in a small city in Iowa, and so far as is known had an "average" rearing. He completed a technical high school course and then enlisted in the Navy. Ed's ship participated in numerous invasions and sea actions. It took more than one direct shell hit, and was finally disabled by a Kamikaze strike. During this final blow, immediately following a near-miss on his gun turret, Ed collapsed. He remembered nothing more until he found himself in a Washington, D.C., hospital some months later. He was finally transferred to a veterans mental hospital where he has remained to now. At first, Ed was mute and immobile. He would remain in fixed position, staring into space, except for sudden wild outbursts of screaming.

While receiving shock therapy Ed showed a sensitive response to the special music recordings provided as an adjunct to treatment. His psychiatrist, becoming aware of this, recommended music therapy for him even though he had no musical background prior to his illness. Violin study was started immediately. The result has been most rewarding. Although Ed's contact with his environment is still poor, there is a complete transformation in him from the beginning to the end of his music session. There is a visible release from inner torments. What is more remarkable is the improvement in coordination and ability to concentrate.
Slowly, very slowly, Ed is beginning to emerge as an individual from his deep psychotic condition of seven years ago.

While the psychiatrists are not very optimistic about Ed's full recovery, there is always the hope that some day the way will be found for his eventual rehabilitation. Meanwhile, he spends hours each day with his music. It is the only activity in his hospital existence that has meaning for him and gives him the faith in himself he so desperately needs.

**Music Rhythm Groups**

Our mental hospitals contain a permanent hard core of chronic, deteriorated schizophrenics who have been hospitalized for many years. Can music or its component elements constitute a vehicle whereby to reach the chronic schizophrenic and alter his behavior in the direction of greater normality?

Several projects co-sponsored with the Musicians Emergency Fund, Inc., and conducted over a period of some years at the Albany Veterans Hospital provide at least a partially affirmative answer. This general hospital has 1005 beds, of which one-third is allocated to the psychiatry services; most of these are utilized for long-term mental patients.

In conducting treatment with a variety of schizophrenic patients, we soon discovered that any activity which stimulated the participation of these regressed patients would provide a therapeutic lever upon an otherwise unyielding mass. The activity had necessarily to be simple but interesting, and a stimulus to continued participation therein. Since music rhythm instruments have been successfully used with child groups at the mental age of four or below, this type of activity was selected for trial with our patients; many functioned at an intellectual level equivalent to a mental age of five or less. The music rhythmic group activity was further selected on the theoretical basis that it would provide the regressed and primitivized patient with an opportunity for creative self-expression and the exercise of initiative. The frame of reference was the patient himself, creativity being judged from the standpoint of his competence and perspective. The rhythmic medium provided such creative, self-expressive opportunities within a wide gradient of ability.

The clinical results more than fulfilled our expectations. Mute and immobile patients were gradually persuaded to pick up an instrument, then to beat or move that simple instrument in co-
ordination with the piano and the other patients in the group. Schizophrenics who had shown no response to other proffered activities now became interested group participants.

In another such study, an experimental group of patients, participants in a special comprehensive treatment research program, had the benefit of rhythm group activity; results demonstrated marked improvement in consequence of this and other forms of rehabilitation treatment such as occupational therapy, hydrotherapy, group psychotherapy, and electroshock. In contrast, a control group that did not have the benefit of such intensive and various treatments remained unchanged during the six-month interval of the trial program. Since then, we have utilized musical rhythm in all clinical ward programs, to induce the schizophrenic patient's participation in social group endeavor.

The clinical experiences just described, together with various observations in this same connection, heightened our interest in the actual physiological and motor response of the schizophrenic patient to music rhythm and led to a controlled experimental study.

**Rhythmic Drum Beat Study**

The evidence is strong that mentally "normal" persons respond behaviorally and physiologically to music and its rhythms. Does the long-term schizophrenic patient manifest an objectively measurable response to such rhythm? If so, then these stimuli might indeed constitute a valid method for the modification of behavior of the schizophrenic patient.

The two measures chosen for study were pulse rate and general motor activity. The cardiovascular and neuromuscular systems in mentally normal persons have been shown experimentally to respond to musical stimuli, but the cardiovascular effects upon the mentally disordered or schizophrenic patient have not heretofore been submitted to controlled experimentation. The motor and neuromuscular changes in psychotics, induced by music, have received somewhat more attention, first by Altshuler and Shebesta, who found that music could favorably alter the general motor output of excited psychotic patients, then by Skelly and Haslerud, who reported a significant increase in the general activity of apathetic schizophrenics when lively recorded music was played.

The subjects were 23 male schizophrenics, median age 60,
hospitalized for a mean of 29 years. The three experimental stimulus rhythms each consisted of a bongo drum solo by a professional drummer, recorded on tape. Each one of the three was made at a different basic frequency, timed by a clocking system: Rhythm A at 54/minute representing a low pulse frequency, Rhythm B at 90/minute representing a rapid pulse rate, and Rhythm C at 72/minute representing the common pulse rate.

The results indicated unequivocally that patterned rhythmic drumbeats do stimulate an organismic response in chronic deteriorated schizophrenics who have been hospitalized for many years. Their neuromuscular responds strongly, and their cardiac rate is maintained at a higher-than-average (for them) level. These objective data demonstrate that older, long-term schizophrenics can be stimulated to behavioral and cardiac response by musical rhythm, their many years of hospitalization and their deteriorated status notwithstanding.

A challenging problem now flows directly from the findings of this investigation. Can the neuromuscular response of these schizophrenics be directed into creative, productive channels? Can we focus the energy increment of the patients, an increment released through the medium of musical rhythms, into a productive direction that leads toward therapeutic success (increased behavioral adjustment)?

In the light of our earlier mentioned clinical experience with music rhythm groups, the answer seems to be "yes." Abulia is a deficiency of will power or conation, a default in the normal impulse to activity. Abulia is prominent in schizophrenia, which present so glaring a default in the normal neuromuscular and motor responsiveness to stimulation.

Musical rhythm demonstrably has power to stimulate the schizophrenic and to induce both cardiovascular and motor response parallel to that of normals. Therefore may it not provide one possible avenue of access through which the schizophrenic may partially be drawn back to normality of response and/or behavior? At the very least, this possibility demands thorough clinical exploration.

**OTHER APPLICATIONS**

Music has been demonstrated by experiment to reduce fear of electroconvulsive therapy. It has a proved influence upon the quality and quantity of patient participation in group psycho-
therapy. It serves an important role in comprehensive rehabilitation and psychological remotivation programs for chronic patients, whether they be schizophrenic, long-term medical, or brain-damaged aphasics. Experimental studies in all these areas have been conducted and reported in recent professional literature.

Does music therapy "work"? The proof of the fact that it does work lies in the rapidly growing place music is taking in the rehabilitation armamentarium. Clinical demonstration of its potency in the rehabilitation task has constituted and will continue to constitute the most important proof of all. As with occupational therapy, manual arts therapy, social services, recreation, psychotherapy, and all the other rehabilitation modalities, the final reckoning of its value lies in the actual clinical result. This is the most pragmatic test and the most exacting of all.
SOME CONSIDERATIONS FOR MUSIC THERAPY WITH EPILEPTIC PATIENTS

CHARLES E. KURZ

There appears to be a near void of material concerning music therapy and the epileptic patient. In addition, misconception, rather than knowledge concerning the epileptic, seems prevalent not only among laymen but also among some hospital personnel. The epileptic is certainly not in the majority at most institutions, however, the hundreds of thousands recognized in this country alone certainly warrant the music therapist’s consideration and best efforts.

The following statements concerning music activities with the epileptic are certainly not all-inclusive or all scientifically justified, but rather ideas and suggestions, not all original, that have been gained through past experience and often the trial and error method.

The basic philosophies and precepts underlying music in therapy seem to apply equally well to the epileptic as other patient groups. The epileptic certainly requires the total approach, that is, physical as well as psychological consideration. The therapist must endeavor to build up the patient’s body along with his confidence and mental attitude, in an effort to assist him in obtaining a means to a plane of constructive thinking, of accepting his disabilities, and of operating at his optimum level. The apparent stress placed on rhythmic activities directed toward improving gross and fine motor coordination are specifically employed in an attempted physiological aid for ameliorating disability. Approximately thirty-five per cent of the patient population of New Castle State Hospital are hemiplegic. That is, paralysis, partial paralysis, or weakness of one lateral half of the body caused by brain damage. In addition, mental retardation, a hint of “institutionalitis” or institutional neurosis, and reactions to certain anti-convulsive medications have helped to make the patient physically slow which, in turn demands stimulating rhythmic activities.

The major portion of New Castle’s patients, which range in age from approximately four years up are moderately to severely retarded. This is not meant to convey that epilepsy is synonymous with mental retardation. Most epileptics, through anti-convulsive
medication and emotional supportive relationships where necessary, are able to lead normal, productive lives in the community. However, the chronic hospitalized epileptic is quite often low in intellectual ability. For this group music activities conforming to the accepted principles of mental retardation are employed. Hospitalized epileptics are frequently slow mentally and unable to quickly grasp and comprehend or to retain information over a period of time. They possess a short attention span, often lack interest, are easily confused, and periodically depressed. The epileptic seems a combination of all patient types. They may simultaneously possess moderate to severe personality disorders, social maladjustment, physical disabilities, an exaggerated need for recognition and affection, plus the ever present and disrupting epileptic seizure. The therapist’s job is therefore varied and all encompassing in the realm of rehabilitation.

A quick glimpse of specific music therapy techniques might include the following: Vocal music, in general, is restricted to unison singing to promote more rapid feelings of gratification and accomplishment. Many singers cannot read the words let alone music. Song instruction is therefore by “ear” or the rote method. Part singing is accomplished through separate section rehearsals, each learning his part as a melody, and parts combined at later rehearsals. This method has proven to be successful and accepted whole-heartedly by the patients. Instrumental rehearsals are conducted in much the same manner although through private instruction, school music classes, and music appreciation, music reading is being vigorously pursued even if only slowly and painstakingly acquired. The by-word of the entire campaign is repetition and more repetition applied as varied and interestingly as the therapist’s talents, ingenuity, and thought processes will allow.

Initially hymns were over-emphasized, possibly because in the past church groups visited wards more frequently than other organizations and the fact that religion is readily turned to by chronic, long-term and especially elderly or geriatric type patients. The problem of variety now seems to be well balanced. It might be interesting to note that the patients most popular hymns correspond exactly to the nation’s “top ten” according to the Christian Herald’s nationwide survey, namely, “The Old Rugged Cross,” “What a Friend We Have in Jesus,” and “In the Garden.” Popular music also corresponds closely with the present public
tastes. Older songs also are quite popular. This might be attributed to past environment, cultural heritage, and possibly the more pleasant portion of life prior to hospitalization. There is no contest between western and classical music. As the patients’ music preference is closely akin to the general public’s this provides the music department with a basis for musical selection. It is intended to “improve” the patient’s musical tastes and appreciation, but not to the extent of provoking unfavorable attitudes. It seems that the selection of institutional music should at least roughly correspond to patient’s desires, as well as their needs, while at the same time serve to draw them closer to public taste and acceptance in the event of discharge.

Instrument choice, because of mental deficiency, for many of the patients must be simple instruments such as the harmonica, guitar, and autoharp. This also seems to roughly correspond with their background and tastes either previous to, or in conjunction with, hospitalization. Efforts to include more formal instrumentation is desired.

Public performance by the patients, which in actuality is somewhat of a controversial subject, is utilized at New Castle State Hospital with what is believed to be many beneficial results. Patient attitudes and acceptance, administrative policy, and the community-institution, support and supply the need for such activities. No instance of patient exhibitionism has been detected. Performance before an “outside” audience, more so than with a patient audience, represents a higher psychological level of achievement and gratification to the members of the musical organization and provides additional contact with society. Patients derive the feeling of doing for others rather than always being the recipient of services, or even pity in extreme cases. Through the opportunity of wearing “dress” clothing, the patient may regard himself on a higher social level than might be attained in the institutional atmosphere. There also is a great amount of prestige in the hospital stemming from membership in a performing group. In addition, such public performances may play a vital part in hospital community relations. It also is an opportunity for furthering public knowledge of mental health practices through actual visual contact and first-hand observation of rehabilitation in operation, rather than lecture type dissemination of information alone.
Concerning ward programs, music therapists are quite aware that before initiating any worthwhile music activity the therapist must determine the particular areas in which the patients require assistance and plan the program to best fulfill these needs. For the chronic epileptic ward some examples could be establishment of a group feeling, acceptance and adjustment to ward routine and hospital environment, and providing opportunity for interruption or possible alleviation of regression. On wards housing the higher functioning epileptic, with increased incidence of discharge, resocialization, rehabilitation, sublimation of socially unacceptable behavior, and assistance in learning to accept and function efficiently with existing disabilities, may be indicated.

In conclusion, it seem that procedures, techniques, and tools for ward programs, as well as for other music activities geared toward the epileptic patient, essentially correspond to the procedures and techniques utilized for other patient types. It is the approach and thought processes, utilizing goals, directly concerned with the epileptic patient that is foremost and possibly the major difference. It is hoped that through expanding research additional and more specific techniques and uses of music therapy with the epileptic patient may be fostered and nurtured.
PART V
MUSIC THERAPY FOR
EXCEPTIONAL CHILDREN
MUSIC THERAPY IN CLEFT PALATE DISORDERS

DONALD E. MICHEL

This is a report of the continuing empirical observations on the use of music therapy techniques for cleft palate speech-handicapped children who were in a six-weeks residential speech therapy clinic on the campus of the Florida State University during the summer of 1961. The clinic was part of the program of the Speech and Hearing Clinic under the direction of L. L. Schendel, and the actual work with the children in music sessions was carried out mostly by music therapy students at the University.

The two student music therapists assigned to this work utilized various group and individual approaches in music. Wherever and whenever possible they attempted to make a direct application of their work in music to the individual speech problems of the children in accordance with the speech therapy goals set up by the Speech and Hearing Clinic. This differed somewhat from the work done in the 1960 Summer Clinic which was mostly exploratory. Music therapy sessions on both group and individual bases were organized on a daily, five-day-a-week schedule.

Materials used included such specialized recording as "We Speak Through Music" as well as conventional community song books, popular songs, and songs chosen from various music education series. A tape recorder was used frequently to record individual and group music production, and a test of musicality was employed to attempt to determine individual levels of musicality. The tape recordings provided an especially valuable body of material for subsequent study and evaluation (which the students used as material for term papers), as well as an immediate basis for comparison by the children of their individual and group efforts. Flutophones were used again in an attempt to teach the children how to expel air through the mouth rather than through

2. Isabel B. Autry and Martha Jan Mickler.

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the nose ("nasal escape")—a problem common to most cleft palate speech disorders. A variation of this technique in individualized sessions by one of the students was the use of a clarinet mouthpiece and the clarinet itself to try to teach the concept of expelling the breath out through the mouth rather than through the nose alone.

**RESULTS OBSERVED**

Results are perhaps best seen through some of the detailed notes kept on all sessions by the student therapists. Some of these were organized to accompany a tape recording of the selected examples prepared for presentation to local groups.

*Uses of Special Recording*

Several ways were found to make use of the special recording "We Speak Through Music" in connection with speech problems more or less common to each child in the group. At times the "sing along" approach was used, where the children listened to a song sung once through on the record then sang along with the recorded song. Since all of the songs on records were fairly simple, and since there was an accompanying book with the songs written out; it was possible to vary this approach by having the children learn the song, then sing it with a piano accompaniment (or autoharp) and, finally, compare their effort with the original recorded version. This comparison technique seemed to be a valuable one, and was employed not only for the group effort but also for individual efforts as the child volunteered to record himself singing a particular song. Examples of songs used for specific purposes are: "I Shall Sail My Ship to the Shore"—used to work on "sh" sounds; "The Flea and the Fly"—used to work on "f" and "fl" sounds; and "There Was a Big Dog Named Guzzy"—used for "b," "d," and "z" sounds.

Variations of approach in group singing were similar to approaches often used in the schoolroom. Sometimes the words to a new song were written on the blackboard and the children were asked to read and learn them before putting them to music. To give variety to classroom procedures children were sometimes encouraged to perform individually or in small "ensembles." The "serial" approach also was used, i.e., one child asked to sing the

first phrase, another the next, and so on through the song. Later, the recorded version might be played for comparative purposes, and to reinforce correctly learned aspects.

Other Techniques Employed

When the work was more individualized, it was possible for the student therapists to work out more creative and unique approaches. For example, with one child who, in addition to the cleft palate disorder, was believed to have cerebral palsy, it was possible to utilize a repetitive rhythmic procedure to help her connect the more complex speech sounds such as “fl.” The song “The Flea and the Fly” (mentioned previously) was difficult for her, and she tended to separate the “fl” sounds so that “flea” sounded like “fu-lee” instead of as it should sound. The student therapist worked with her by having her practice the separated sounds in rhythm, then, gradually speeding up the tempo until two pulses (“fuh” and “lee”) became one and the sounds connected. This worked out successfully with this child, and she gained considerable confidence in herself through the music sessions, both individual and group.

While not employed as a specific technique, one experience served to provide a certain insight about these handicapped children. This was the instance of having a severely handicapped cerebral palsied child present during one of the regular group music sessions. The severely handicapped child had been coming to the University for a long time for regular work in music therapy, which emphasized physical activity and movement to music. She would be placed on the floor because she could not support herself upright or in a sitting position. Bells and rhythm instruments would be fastened to her limbs and she would be encouraged to move in rhythm to the music provided. On the particular day when she became a temporary part of the cleft palate group, it was obvious to the other children how much more severely handicapped she was than they were. The children responded empathetically, after a brief explanation was given about the cerebral-palsied child, and forgot about themselves in trying to encourage their little friend to keep time with the music, or to give them starting or stopping signals.

The point was that in responding to the greater need of others, sometimes a handicapped person gains the greatest motivation
possible, as well as the self-forgetfulness which is sometimes important in facilitating learning. The children seemed somehow better able to accomplish their speech improvement goals this particular day.

In addition to teaching several of the children individually how to play the flutophone (a "pre-band" type of plastic instrument), several children were given individual instruction in playing the clarinet mouthpiece (since the clarinet was the principal instrument of one student therapist). Others were encouraged to learn how to play tuned jugs and bottles (in small groups). The purpose of this type of activity was to teach the concept of expelling air through the mouth rather than through the nasal passages. In several cases these approaches appeared to be beneficial although it is only fair to note that no objective measures were made of the amount of "transfer" which took place with respect to improved speech.

CONCLUSIONS

This has been an attempt to report the continuing empirical observations of the employment of music therapy techniques in cleft palate speech disorders made during the second summer residential speech clinic held on the campus of the Florida State University at Tallahassee. Although the work, carried out by two music therapy students, was in a sense experimental, no attempt was made to measure results of such procedures objectively or statistically. It was hoped that steps toward more objective measurement of results could be taken in succeeding summer clinics, but it should be noted, as pointed out by the Director of the Clinic, L. L. Schendel, that any results in terms of improved speech are difficult to pin down to any one procedure or therapist when such a clinic is operated on a cooperative plan which uses a variety of modalities along with specific speech therapy with individuals. In point of fact, improvements gained can only be completely measured in terms of each individual's spontaneous and connected speech—which is a practical impossibility when each individual child is out of reach of the clinic after the summer program is finished.

This is not to say however, that evaluation was impossible. In objective observations by several qualified individuals, and assisted by tape recordings, it was possible to conclude that the results of music therapy procedures can be considered quite
effective in work with cleft palate speech problems. Not only were the children able to reap the benefits of musical participation in terms of expanded perception of sounds in general—pitch, range, vocal quality, etc.—through singing and other forms of music, but also many of them were enabled to learn concepts of correct speech articulation through the medium of music in various forms. The learning of improved social skills through the group music participation and the development of increased self-confidence through individual and group musical accomplishments were "side" benefits realized by many of the children. These benefits seemed of considerable importance, especially to those children who had come to feel somewhat isolated from other children in school because of their speech handicap, and to those children who had come from environments which deprived them of the pursuits and benefits of music normally found in other strata of our culture.

Finally, the over-all results of a second summer's experiences with music in the speech therapy program for these children led to the conclusion that music should have a definite place in future residential speech clinics of this type. That it should be carried out by qualified music therapy students under professional supervision seemed obvious. And it seemed equally obvious that future clinics offered great challenges for refinement of procedures and for research on a more scientific basis.
The problem that we see most often in the child guidance clinic is the over-anxious child. Typically, this is an over-conforming child, an over-inhibited child, an over-dutiful child. When an individual is anxious and feels dependent upon adults, the safe thing to do is to please adults or at least not displease adults, and the good child is the child who doesn't do much except what he is supposed to do.

This kind of background occurs selectively in the middle class, in the University families, places where considerable achievement is expected of children, where there is concern about the family status, the family standing, where there is concern about educational progress. It tends selectively to occur in families in which the parents are not very warm and sociable, but a little cool and distant in interpersonal relations; where they don't readily give the child the feeling of belonging, but rather where he feels he has to be a good child in order to have parental approval and parental love.

No young child would survive without parental care, and anything that creates concern in the young child about the continued interest of his parents creates fear, and when you have the impulse to do something and you feel that if you do it your parents won't love you, you're in the situation of divided impulses that characterizes anxiety. This is the kind of youngster who is prone to psychoneurotic illness, to psychoneurotic breakdown, to night terrors. I sometimes tell my students this story (I don't know if it is historically true or not, but I think in terms of personality it is true): a young man came to see his family physician with the complaint that he had a headache, a sense of pressure as if there was a steel band on his temple pressing in. (This is not an uncommon kind of psychoneurotic complaint.) The physician having checked him over for his sinuses, blood pressure, and such things and finding nothing to account for the headache, began to think in terms of muscle tension and adjustment to life and then said, "What do you do for a good time?" The young man confessed he didn't have a good time. "Well, was there anything he did for relaxation? Did he play any games?" No. In college he had to work very hard, working...
most of his way through, and he had no time to go out for athletics. What about other games—card games for example? The young man explained that he grew up in a good Christian family where a deck of cards was regarded as a device of the Devil and he had never learned to play cards. Well, did he ever go out with other fellows? He had tried that but he found that most of them smoked and some of them drank and nearly always the conversation got around to subjects that made him uncomfortable—that his parents hadn't wanted him to listen to, so he had given that up. Well, did he ever take a young lady out, go out on a date? He had tried that too, but he found that this put him in situations that gave him problems of conscience, because from his experience the girl wanted either to dance (which was not approved in his family) or she wanted to go to the theater, and his parents had disapproved of the theater. At this point, the physician exploded, "The trouble with you is your halo is too tight!" There is some similarity between this explanation and the diagram of a shell of inhibition planted deep within the personality where there is a blocking off with too many of the natural impulses being held back by learned repressions. Thus, a type of personality in which there is a development of tensions and complaints.

Now this is the classical kind of problem with which psychotherapy was developed and to which it applies best, and most patients of this kind are treated on an out-patient basis. Very severe cases may be seen in mental hospitals, the less severe ones in general hospitals and increasingly in day care programs and such intermediate places.

Here the problem is essentially one of anxiety—the development of tensions within the personality. And anything you can do to reduce anxiety is ordinarily helpful. This is the situation where the traditional methods of psychotherapy that seek to bring into consciousness unconscious ideas, have an applicability. I think the point hasn't been sufficiently recognized that when you do bring into consciousness ideas hitherto repressed you've done something to that shell of repression—you've kicked a hole in it here and there, and this brings about an easier balance of the personality. The emphasis has been upon bring into consciousness repressed ideas, and I think perhaps more emphasis is deserved on the change that has to be brought about for those repressed ideas to come into consciousness.
With children in particular, we see a problem between balance, between those elements which are anxiety provoking—and this means distance, disapproval, too high standards, and those things which are encouraging of self-confidence and freedom of responsiveness, and this means emotional support, praise, friendliness, acceptance. These things can be given in hospital or a treatment setting, and any area of achievement, of successful emotional expression, aids these individuals. This is the way in which performance in music therapy can be distinctly useful.

Now a second group of children we see quite frequently in the clinic, not quite as large a group as the first group, are what I call the unsocialized aggressive group. These are the mean, hostile, impulsive, uninhibited youngsters who have a grudge against the world because they feel the whole world has a grudge against them and who take out their grudge when they are not afraid to, which is too frequently. This kind of youngster puts a "kitten through the wringer," as one I remember did. Here the typical background is one of overt parental rejection. Nobody ever wanted the child, and he knows it. Or, it is one of being raised in a congregate institute, an orphanage where the relationships are with a series of adults who are shifting, where there is no building of trust in a mother figure. Or, it is the youngster who has been in six foster homes by the time he is five years old.

There are a certain number of children who are simply not accepted by their parents, and here the problem of the mother comes into the picture. Of course, if the child is illegitimate, or if the mother finds herself cemented in an unhappy marriage by a pregnancy when she was getting ready to rid herself of a husband who was alcoholic, or when this child represents the fetter that keeps her in an unwelcome marriage, the situation isn't a favorable one to good acceptance of this child. There are a certain number of cases in which some support for the mother will make possible her acceptance of this child. But here you have a different kind of problem from those we considered with the over-anxious, over-conforming child. It's true that both this kind of individual and the over-anxious child need acceptance, but here you have to give acceptance and persuade the individual you are not against him and at the same time do a certain job of training—set limits, have him learn that the problems are brought on by his own behavior. Here we have diagramed an inadequate shell of inhibition with impulses coming into action—not
only consciousness but also into action very freely. This is the kind of youngster who gets into trouble at school and who gets put out of school and comes back and throws a brick through the window, then throws a few stones at the janitor, who comes out to "shoo" him off. The extreme of this kind of hostile aggressive behavior in the adult is seen in the individual now classified as the anti-social personality whom we used to call the psychopathic personality. The problem here is one of the kind of acceptance and training he should have had at two and three years of age. Again, any particular activity he can get into is helpful.

There's a fair amount of difference between this kind of youngster and the group delinquent. In the socialized or group delinquent we typically have an individual whose early experience with the mother has ordinarily been adequate to bring about social responses and social feeling, whereas this unsocialized youngster was never wanted, never developed a relationship with anyone whose approval he really wanted, and whose favor he wanted to develop, or whom he wanted to be like. By contrast, with the socialized delinquent you have a youngster who developed the basic socialization in his early years and who typically lives in a delinquency area. The home is likely to be over-crowded, disorderly, dirty, the meals not on time; and there is emotional acceptance, but no effective organization of the pattern of living. The child finds the street more attractive than the house, and he becomes a part of the street gang which by natural process of growth becomes a delinquent gang. Here you have a more normal personality than with either of these two types we have considered. He differs from the average normal youngster in being better muscled and being venturesome. About a quarter of these children have school problems in the area of reading, or problems of development in relation to school beyond what you would expect in view of his intelligence test performance. He is likely to dislike school. He is likely to be truant from school, likely to fall in the company of other youngsters who "cut" school. He is likely to be away from home overnight. With the boys we see the development of stealing as the outstanding behavior. With the girls it is the problem of staying out late at night that parents are most concerned about and this problem ordinarily reflects sexual behavior. Stealing is a little less prominent with the girls, and they don't gang up as the boys do. You rarely see anything you could call a girls gang. We see girls who are
girl-friends of boys who are members of boys gangs. Some of you probably saw "West Side Story" and this gives you the picture.

Now here you get frequently a capacity for a kind of enjoyment of music, which is apt to be rhythmic music. I've been impressed with how much could be accomplished by some of these kids in a training school if they had eight or ten thimbles and a washtub, or more recently, bongo drums.

We also have the problem of the mentally retarded, and this problem is chiefly one of normal development in slow motion. There tends to be increasing discouragement as they find they can't keep up with their peer group. Special education classes, where they can go at their own pace and not compete with those they can't compete with, at least not so conspicuously, are a great help. We know the use that has been made of simple music in the training of young children.

We have two other groups I want to discuss briefly. One is the brain damaged children who are not mentally defective. Of course, brain damage often does produce mental deficiency. When it doesn't, it often produces some special deficits in the capacity for visual-motor coordination, in the capacity to do such things as copying a diamond, copying a design, or use the Kohs blocks. Characteristically there is over-activity, distractibility, short attention span, inability to concentrate, being always at the mercy of new stimuli. Some educational facilities have tried to develop small cubicle stalls for working with these youngsters in a 1-1 relationship. There is too much distraction in an ordinary classroom.

One other group that we get is schizophrenic children. Specifically I want to mention Leo Kanner's description of early infantile autism because this leads a bit to something related to the adult's schizophrenic problems. Kanner described children typically around the age of five who don't relate to people but who do relate to things. That is to say, they don't look you in the face, they go about playing with what is available. If you pick up a toy the child is playing with, he will grab at your hand and try to take it from you, but he doesn't choose to recognize you as a person. Some of these youngsters will show fear of a hypodermic syringe (if they have had shots) but are not afraid of the doctor or nurse behind it. They choose not to recognize the existence of people. One item that is rather characteristic and
quite frequent, is the failure to reverse pronouns. The child refers to himself as "you" and to the person who is talking to him as "I." He fails to get the sense of relationships, or to be interested in the sense of relationships. These children often fail to develop speech, or are often slow in developing speech. We had a little five year old youngster last summer who came through our hospital with no capacity to perform on an intelligence test above two years, with still a need for help in toileting, and who raised peoples' eyebrows as he went around reading signs, "coffee shop," "danger—high voltage." This youngster at five with no performance in any intelligence test area above two years, had a word recognition at the fifth grade level. This is the kind of discrepancy that can occur in this kind of youngster. We have presently a child of three in the hospital who does not speak at all, where the problem, although he is relating more to people now, was initially one of withdrawal from people. One youngster I remember, would play constantly with a little prism in the sunlight making rainbows. Kanner speaks of a couple of children who would spin anything that could be spun and then jump up and down with glee. With the adult schizophrenic, we have three major processes evident, and depending on which is the more evident, we classify them in different types of schizophrenia. We have withdrawal, which this type of youngster shows. We also have disorganization of thinking. If withdrawal is extreme, we call it a catatonic stupor. If disorganization is extreme, we call it hebephrenic schizophrenia. Then we have the morbid healing process of the development of delusional ideas which in most cases seem to have some function in reducing the tensions within the personality by projecting on other things for which he is not willing to assume the responsibility himself. Thus, development seems to reduce the disorganizing process and gives us the picture of paranoid schizophrenia.

Back in 1950, when I came back with the Veterans Administration as Chief of Psychiatric Research in the Central Office, I was struck with how much there was in common between this kind of individual and the much younger child. I suggested it would be desirable to study the methods of nursery school teachers who had to deal with a normal population which had a very low frustration tolerance and a very low level of social competence. I was encouraged about the same time to visit a program that a corrective therapist had developed in the V.A.
Hospital at Danville, Illinois where he worked with a series of mute withdrawn schizophrenics who would do nothing, and brought them back into human contact and relationship. Some of them went home. Others developed speech after periods of recorded non-speaking as long as seven years. I was interested to find that he had, essentially, as I saw it, a nursery school program, complete with rhythm band, marching activities and so on. He started individually with these patients in getting them to relax, and developing individual personal relationships in talking with them while he had them relaxing, and getting them to do things. Then he brought them through the early stages of re-education in what had a surprising number of elements in common with pre-school and kindergarten work. With the individual who is disorganized, any area in which he can cope with things and get satisfaction helps him and may mark the beginning of reintegration.

There is no regularity about what it is that makes the severely regressed patient start to improve, except that it is some area of inter-personal relationship. Success in some activity, whether it is golf, bowling, music, inter-personal discussion, may start the process but somebody has to help him in some area in which he can achieve some measure of success.
PART VI
HISTORICAL BASES FOR MUSIC IN THERAPY
HISTORICAL BASES FOR THE USE OF MUSIC IN THERAPY

RUTH BOXBERGER

INTRODUCTION

Generally it does not come to the attention of the laymen that music and the art of healing have inextricably entwined since the dawn of civilization. Many ancient mythological figures were the gods of both music and healing. To what extent music has a place in the treatment of a disease is linked to the socio-cultural environment and the philosophy that prevails at that particular stage of civilization.

Sigerist\(^1\) calls attention to the fact that a biological concept of disease is a relatively recent one in terms of the history of civilization. To man, disease is not only a biological process, but it is also an experience; and it may be one that deeply affects his life. Human institutions have always reckoned with disease in one way or another; two factors are involved in the genesis of disease: man and his environment. Human life enfolds itself in an environment that is both physical and social. This social and physical environment which is responsible for most diseases is in turn shaped by the civilization that has altered man's life.

Religion, philosophy, education, social and economic conditions—whatever determines a man's attitude towards life—will also exert great influence on his individual disposition to diseases and the importance of these cultural factors is still more evident when we consider the environmental causes of disease.\(^2\)

In his discussion of disease and social life, Sigerist\(^3\) gives further emphasis to medicine as a social science by stressing that the goal of medicine throughout all ages has not been merely to cure diseases, but also to keep man adjusted to his environment or assist in his readjustment to it when illness has taken hold of him.

Music as a social art is not difficult to understand if there is

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an awareness of art's function in society. Hughes\(^4\) believes that music reflects certain needs of society; that music has interpenetrated life in the most varied way. To those who object on the basis that music is a matter of personal feelings rather than something which concerns a social group, he answers that personal emotions are not self-generated but they conform more or less to a social standard which is illustrated in the life of man, dramatized on the stages of theaters, and exemplified in the pages of literature. He suggests that music is a meeting between sound and human consciousness; however, this is always an incomplete description of the relationship. The final meeting of music and consciousness is conditioned by two factors—the nature of the individual and the nature of his society. “On the one hand there is the solitary and inviolable meeting of the individual sensitivity with music, on the other, the group pattern which impels towards likeness, conformity, and common experience.”\(^5\) The musical nature of the individual is very largely determined by the society in which he lives.

Lang\(^6\) believes that to understand and appreciate music as an art there must be an understanding and knowledge of the role of the arts in society at the various stages of civilization. He writes that “serious art becomes so only if the elements of its content are always some projection of life in its entirety.”

Music is not a mere skill to be taught by rote and exercise. It is definitely a part of our civilization, of the humanities, and with them is subjected to the formative power of the laws of human life. Thus music is not the private affair of musicians but a social phenomenon of universal importance.\(^8\)

Music and medicine cannot, therefore, be considered other than as part of the social phenomena of civilization. The role of music in therapy is conditioned by the prevailing physical and sociocultural environment in which it operates, and the practice of

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music therapy is influenced by the prevailing philosophy of the era. Furthermore, music and medicine have in common, elements of magic, religion, and rational-scientific thought that have survived in some degree to the present time.

THE ORIGINS OF MUSIC

The beginnings of music are lost in the mists of prehistoric times. Even though there are primitive civilizations that still exist, there is no race so primitive that it can be considered a relic of the very beginnings of human culture. Discussions of primitive music are drawn for the most part, from studies of the peoples of simple cultures existing at present, conventionally called primitive. There has been, however, no lack of theories about the beginnings of music. Diserens and Fine point out the tendency to substitute the "myths of science" for the "myths of traditions and metaphysics." They review some of the more prominent theories such as Darwin's contention that music was a eugenic factor effective in conditioning the survival of particular varieties of the species; Spenser's view that music originated from impassioned speech; and Stumph's assertion that music had its first beginnings in signal calls. They relate Bucher's views on the relationship between work movements and music to a much later state of musical development.

Schneider also reviews many of these theories in his discussion of primitive music and concludes that there is evidence to be found in the study of primitive tribes that both supports and rejects these theories. He tends to support the idea of "sound languages" which may represent the common source of both speech and music. Cassirer concludes that language, art, and myth began as a concrete undivided unity which gradually resolved into independent modes of creativity. "Consequently, the same mythic animation and hypostatization which is bestowed

upon the words of human speech is originally accorded to images, to every kind of artistic representation.\textsuperscript{13}

To support his theory that music came into existence from the desire of primitive peoples to have a special language other than ordinary speech to communicate with the supernatural, Nadel\textsuperscript{14} presents a massive amount of evidence. The preponderant amount of religious music utilized by all primitive peoples in ceremonies, rituals, and religio-magical rites would lend support to his theory. Sachs\textsuperscript{15} comments that in spite of scores of theories by philosophers, economists, and scientists, there is not even one uncontested fact about the origins of music. He discounts the validity of any one theory to provide the answer because music in its cultural context is so complex that it is improbable to suppose it had only one source.

While the "myths of science" provide a basis for speculation about the origins of music, the "myths of tradition and metaphysics" are in complete agreement in that music was of divine origin. Not only was it a gift of the gods, but it was at times credited with supernatural powers that willed the deities to action.

Schneider\textsuperscript{16} discusses the significance of totemistic cultures in the history of music. The totemistic conception of the world is anthropomorphic. The natural world is animated by a variety of good and evil spirits, more or less endowed with voices, whose continual interaction determines the course of the world. The sounds of nature are the voices of the spirits who dwell in natural objects. In totemism the voice has much the same significance as numbers had for the Pythagoreans on a smaller scale; it is a mysterious bond that united all things in the universe. When primitive man imitated the voice of his totem with the greatest realism, he imagined that he obliterated the boundary between subject and object and identified himself with his totem; he became a sound-symbol. This symbol, perhaps the oldest in the history of human culture, is the voice of the dead ancestor, whose mystic body survives in the totem. In Australian mythology these mythical

\textsuperscript{13} Ibid.
\textsuperscript{16} Schneider, \textit{op. cit.}, p. 58.
ancestors, having finished their work and taught men the rites and songs necessary for the maintenance of Creation, sank down exhausted in a cave, died and became petrified or turned into bull-roarers.

The views regarding music held by the Chinese in antiquity were remarkable in that “its essence was conceived to be not sound but a transcendent power. To a considerable extent this view of the nature of music survives even to this day.” Farmer believes that “it is not improbable that music, or at least sound, stood at the cradle of all religion.” Animism certainly had its origin in sound, for when primitive man struck a piece of wood, he naturally concluded what he heard was the “voice” of the object struck. In this way he assumed that by awakening the “voices,” he could propitiate unseen nature of which they were all a part. Before the days of Menes, its first King, Egypt was ruled by gods; one of these, Osiris, was responsible for teaching the world the arts of civilization. What enabled him to accomplish this was his “persuasive discourse” combined with song, and all manner of music.

The notion that the power of music, especially the intoned word, can influence the course of human destiny and even the order of the Universe, goes back to the very oldest surviving form of Indian music, namely, the music of the Vedas. The intoned formula is the pivot of the whole elaborate structure of Vedic offering and sacrifices. It is the power of the words, enunciated with the correct intonation, that determines the efficacy of the rites: a mistake may destroy everything. The instrument that conveys that power is the word. It is impossible to overlook the connexion between Brahman, in the sense of divine principle, and brahman in the sense of sacrificial formula or incantation.

Well known, of course, are Apollo, who was both the god of music and of medicine for the ancient Greeks and later the Romans; Woton, the Jove of Teutonic mythology who was the inventor of music and songs of magical powers; and Jubal, who was associated with the beginnings of Hebrew music. It is not necessary to pursue this further, since it becomes quite evident that the members of primitive and ancient civilizations believed music to be a form of divine revelation, and as a result of this they entertained strong beliefs as to its power and efficacy in their lives.

**Music and Medicine in Primitive Cultures**

At all times disease isolates its victims socially because an individual who is ill is different from the healthy people around him. The sick man is thrown out of gear with life; he finds himself confined in his movements; he may be helpless and has to rely on the assistance of others. Writers\(^\text{21,22,23,24}\) who have discussed the effects of disease on the lives of primitive peoples agree that the criterion for illness is more often a socio-economic one rather than pain or other distressing symptoms. As long as the individual who is ill can continue to live the life of the tribe, i.e., as long as he can care for himself and his dependents, his condition does not cause any strong reaction on the part of the individual or his society. This changes, of course, if his condition evidences a fever or any other symptom of a disease that could touch off an epidemic—then the reaction is usually abandonment by the tribe—he is dead socially long before he is dead physically. Primitive man does not inquire into the cause of disease; although in the case of tribes belonging to a higher stage civilization, there is a more pronounced desire to ascertain the cause of illness. Often the concept of illness or disease may be a formulation by the medicine-man rather than by the patient. The sick man is considered a victim, unable to live like other people because some-

\(^{21}\) Sigerist, *op. cit.*, pp. 131–146.
\(^{23}\) Schneider, *op. cit.*, p. 1–82.
one has worked magic upon him, an enemy has done something to him, he has been deprived of something necessary for life, or the spirit of a demon has taken possession of his body.

Sigerist\textsuperscript{25} considers primitive medicine to have been related primarily to magical practices, although it contained religious elements. Rational treatment was applied as part of ritual. A drug did not act as a drug; the ritual under which it was given, the incantation pronounced over it provided the power to cure disease and alleviate suffering. Thus magical, religious, and empirical elements are blended in primitive medicine under the common denominator of magic. The sick man enjoys a special position in society; he is the guiltless victim of secret powers which are recognized and warded off by the medicine man. Later, in higher stages of civilization man is not an innocent victim, but rather is one who through pain is making atonement for his sins. Disease then becomes a punishment for sin; this view is encountered in Babylonian society and in the Old Testament of the Bible.

\textit{Music in Primitive Society}

There are still peoples who are conventionally called primitive; these are inhabitants of simple cultures that possess no system of reading and writing, although they usually possess some kind of tribal organization. Folk music generally is distinguished from primitive music because it is derived from groups that are part of higher cultures, but who are not themselves musically literate.\textsuperscript{26} The study of primitive music is of importance to the musicologist, anthropologist, folklorist, and to the psychologist; to the latter it is especially helpful "if he is trying to establish universal types of human behavior in respect to music, or if he is trying to formulate the psychological laws by which people react to it, he must take into consideration the many primitive styles and not base his conclusions on Western music alone."\textsuperscript{27}

For primitive man music more than any other art permeates every phase of his existence; it is bound up closely with his everyday life. In primitive societies music generally plays a more

\textsuperscript{25} Sigerist, \textit{op. cit.}, pp. 131–147.
\textsuperscript{27} \textit{Ibid.}
important role than in most cultures in Western civilization. This role is enhanced and supported by the fact that primitive peoples participate intimately and actively in the creation and performance of music and the dance. The same songs are known by all members of the group and there is little specialization in composition, performance, or instrument making.

It is difficult to find an essential difference between the role of music in primitive societies and the role of music in high culture, for, although functional music predominates in primitive culture, it is also found to a considerable extent in Western cultivated societies. The chief distinction in role is quantitative: among primitive people, functional music is far more frequent in proportion to the total amount of music performed.28

In discussing primitive melodies Schneider considers primitive melody always as "the expression of an idea. Primitive man sings only when he has something to express."29 He goes on to say that many of the supposed nonsensical syllables have a magic quality; they have the power to evoke a spirit or frighten it away. To sing a song without reason or thoughtlessly is to be avoided, for every note summons up a spirit; it would be just as rash as to sound the medicine rattle needlessly. Melody has a great significance for primitive man; it has a magic power which must not be squandered or abused.30

This growth of melody is undoubtedly one of the main reasons why music is so significant in the life of primitive peoples. Music and dancing create a movement which generates something that is more than the original movement itself. As he sings and dances man discovers in himself an all-pervading element whose intensifying, liberating, or healing power is unknown to him in everyday life. Music which has such an intensifying effect grows to the point of ecstasy.31

According to Nettl32 proficiency in composition is related to a maladjustment to the culture and is often associated with religious activity. Indeed, musical and religious specialization are

28. Ibid., p. 10.
29. Schneider, op. cit., p. 2.
30. Ibid., pp. 3-4.
31. Ibid., p. 4.
often correlated, and they are probably the two activities of primitive life in which specialization most commonly occurs. The most important and frequent use of music by primitive peoples is during their religious rituals and ceremonies; the next most frequent use is for the accompaniment of religious dances. There are also a considerable number of love songs and songs which may accompany storytelling. War music is also a part of the musical experience of primitive man. Musical signaling plays a part in the life of many primitive tribes; an instrumental tone is substituted for speech tone, and the speech-melody pattern of language is thus reproduced in signaling. The wide repertoire of songs that the primitive cultures possess reflects the whole of their lives in the “utility” of their music. Music as entertainment or as a leisure time activity emerges in higher and more complex cultures.

Boas and Nettl both comment upon the concept held by primitive man that music is “good” rather than “beautiful.” The concept of music as being “beautiful” is rather undeveloped, and music is considered “good” or at times “powerful” because it serves a useful and necessary purpose or because it has some supernatural powers that are being utilized. This is not meant to imply a lack of enjoyment or pleasure in music. Boas believes that “all human activities may assume forms that give them esthetic values” and “the very existence of song, dance, painting and sculpture among all the tribes known to us is proof of the craving to produce things that are felt as satisfying through their form, and of the capability of man to enjoy them.”

The Role of the Musician in Primitive Society

The role of the musician varies in primitive society; but whatever his role for a particular tribe, it is connected with his personality and his tribal “image.” As Sapir points out that “for the primitives . . . religion is the one structural reality in the whole of their culture and that what we call art and ethics and science and social organization are hardly more than the application of the religious point of view to the functions of daily

It can be seen then, that the musician, who may be called a medicine man, priest-practitioner, priest-magician, or shaman, has considerable importance and power in tribal life. While all members take part in musical activities, a differentiation is made between certain individuals who have special powers or privileges and the other participating musicians.

In general the musician is highly esteemed while practising his art, because he is regarded as the possessor of a higher power. But he is also feared, or despised. He is honoured in public but avoided in private. That he is able to traffic with the world of spirits makes him a somewhat sinister figure, and the more intensely a community feels his power the more it tries to keep him at arm's length.

Other writers describe the musician or priest-practitioner in much the same manner. This mystery or "aura of the supernatural" is, no doubt, projected for the purpose of impressing primitive man with the power and importance of the priest-practitioner. More often than not, the tribal "musician" is one of the individuals considered maladjusted to primitive society. Those individuals who seek out solitude and the educative effects of suffering are considered antisocial according to tribal standards.

Therapeutic Aspects of Primitive Music

Because music permeates every aspect of primitive society, it is difficult to differentiate between the style of music used specifically as part of the healing process and music as practiced in other areas of community life.

The relation between the musical style and the content of the song (i.e., the words) lies not in the external occasion (rain, war) but in the prevailing psychological tension. If the witch doctor implores the spirit of disease to release his patients, the song will be friendly; if he fights it with his spear, the song will be warlike; yet both will be medicine songs.

The particular form of healing ritual or healing seance is related to the prevailing philosophy of disease as developed by the tribe. It becomes the task for the musician-priest to discover which spirit is responsible and to use the right healing song to entice the spirit from its dwelling place in the patient’s body. While considerable importance is attached by many tribes to finding the right song for the healing seance, particularly among those of totemistic cultures, the importance of the group to the rituals must not be overlooked. Radin and Densmore both describe healing seances where a chorus of sorts functions to help heighten the patient’s desire to get well. Since so much of primitive music is a function of the entire community, it is to be expected that the participation and support of the sick man’s friends and relatives in the healing rituals would intensify the emotional effects of the music upon the patient.

Music may be used by the priest-practitioner to evoke the spirit in order to assert his power over it so that the illness is dispelled, or it may be his ability to select the right “healing song” that is important. Music may serve as a form of invocation before the actual healing rites or magical incantations are performed, or it may be the incantation performed over the drug, herb, or other rational treatment that the musician-priest utilizes in the situation. Also, it may serve as the paraphernalia of his office to impress the patient with his marvelous powers, the music and medicine rattles and drums may serve as sort of a “diploma” of his practitioner’s art.

The constituent elements of such a curative-drama are essentially the same throughout the aboriginal world. Naturally, different portions are more heavily stressed in one tribe than in another, depending very largely upon the extent of the organization of the priest-practitioner, the measure in which his ideologies have been victorious, and the degree to which he has become economically and politically entrenched.

In conclusion, it may be said that the use of music in the treatment of disease has an important and varied role in the life of

42. Densmore, *op. cit.*
43. Radin, *op. cit.*
primitive man; it is intimately related to the magico-religious practices of his tribe in exorcising disease.

**Music and Medicine in Antiquity**

Before considering the musical and medical practices of the Ancient Greek civilization which has left such a marked imprint upon later civilizations and cultures, there are several earlier cultural influences which should be mentioned briefly. Previously it was noted that during higher stages of civilization, the prevailing concept of disease does not consider man to be the innocent victim of disease, but rather through his suffering he is making atonement for his sins. Where such a view was prevalent, the sick person was socially isolated in a particularly severe way. This approach to healing and disease was held by Babylonian society, and can be found in the Old Testament of the Bible.45

In the developing civilizations of the Babylonians and Egyptians the theory of disease shifted from magic to religion. Babylonian medicine was an elaborate system of religious medicine; all disease came from the gods, and the task of the priest-physician was to discover and interpret the intention of the gods so he could placate them. In ancient Egyptian medicine the three elements of magic, religious, and rational treatment of disease were found side by side; but the split had occurred to where purely rational and purely magical texts on medicine exist. By the time of the golden age of Greece, a rational system of medicine came into being that attempted to interpret the nature of health and disease.46

**Music in the Early Civilizations**

During the nomadic period music had an important part in the secular and religious life of the wandering Hebrew tribes. They had many songs including chants of praise, laments and dirges, welcome songs for heroes, war songs, and songs about their labors. In the more urban life of Palestine there appeared varied and larger types of instruments; also, there developed the guilds of musicians. There is limited evidence from the Bible as to how the Jewish people regarded their music, but Leichtentritt comments upon Hebrew music in the following manner:

46. Sigerist, op. cit., pp. 132–133.
Hebrew music had already emphasized the emotional power of the art. In the Bible music and medicine, the art of healing sickness, are closely connected by mysterious magical ties; music has the power of calming as well as of exciting the passions. The Greeks intensified this doctrine by basing on it their entire system of public education.\(^{47}\)

The earliest civilization known was that of Mesopotamia or Babylonia as it is often called. In the temples of Babylonia the gods were worshiped, and here the priests and other intellectual leaders of their day spent their time in study and seclusion. "A close connection between gods and music in Mesopotamia is significant. One of the most ancient of the gods, Ea, the ruler of the deep, has his name written with a sign which stood for drum (balag) . . ."\(^{48}\) First among the liturgists was the precentor, who was not a priest, but his duty was to intone the liturgic cantillation; the chief precentor, who held the highest position in the city, reveals the sacred significance of his office.\(^{49}\)

The precentors were formed into guilds and they were housed, seemingly, in the temple college, just as were vicars-choral in Christian Europe. Here they were taught the mysteries of their sacred office, including a precise knowledge of the cantillation (kalutu) which like the prae-cantus of the Christian Church, was an art requiring a long training.\(^{50}\)

The liturgy demanded a fixed and immutable chant, and variation by precentor or chorister would be unthinkable, since its whole efficacy depended on a rigid interpretation. The word for music also had the connotation of "joy"; music was used to accompany all aspects of life and was also part of education. The influence exerted by Mesopotamian culture on the western world was far reaching. These people may be considered as the pioneers of civilization; they contributed remarkably to the progress of music. Their culture became the seed of Western

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intellectual development since it infiltrated into Egypt and Greece.51

As in many other ancient lands, Egyptian music was closely associated with religion and ritual. There is no end to the legends of Egyptian deities, who were probably of totemistic origin. There was much ceremonial utterance that had magical power; one aspect of the temple liturgy was the going forth of the voice. They believed the "voice" could summon the gods; the sounds emitted escaped common mortals. Each note had its peculiar force and great care must be taken not to change their order or make any substitutions. The musicians in Egypt enjoyed high prestige and were closely associated with the priests and other leaders. Music was not only used in the temples, but the social life of the day demanded music from the cradle to the grave. For the Egyptians, music cast a "spell"; sounds were symbols of something else. The music, as generally heard, was one of the concomitant joys of life. The Egyptians also had considerable influence on other nations; their music was set up as an ideal in Plato's Laws.52

While the music being performed was different in each of the ancient civilizations, it should be noted that it always had a close relationship with the medical practices of the day. Medicine was a function of religion; the close relationship of music to the temple rituals indicates why it was so intimately bound up with medical practices in the cultures of ancient peoples.

The Greek Philosophical Spirit

Thales of Miletos is often considered the first philosopher, not because he wrote a book, but because he noticed the reality of things and reflected about them. He sought explanations of the causes of things. Gradually, the early philosophers and investigators of nature extended their studies to the problems of health and disease. Health and disease were no longer explained in terms of magic and mythology, but in terms of causation. The school or cult of Pythagoras played an important part in the development of a rational method of inquiry for the causes of health and disease. Health appeared as a condition of perfect

51. Ibid., pp. 247-253.
harmony or equilibrium; an upset of this balance manifested itself in pains, fevers, and other symptoms of disease.

So far-reaching was the influence of his doctrines that various ramifications may be found in subsequent philosophies. Pythagoras formulated his concepts into a definite mode of life and living based on the premise that man's soul is a harmony, and that the momentous things in man's life is to win the soul to virtue; for virtue is harmony, and likewise all good and health, mental and physical . . . . It was his belief that if one employed music in daily life according to a prescribed manner, it would make a salutary contribution to one's health; . . . he used his knowledge of music for his daily singing and playing which were an inseparable part of his "catharsis" or cleansing of the soul. By this term he was accustomed to designate medicine which was administered by the aid of music.\(^53\)

The concepts of disease and health held by the Greeks differed considerably from those in earlier civilizations. The position in Greek society of the individual who was ill differed greatly from primitive societies. The ideal Greek man was perfectly balanced in body and soul, noble and beautiful; when he was removed from this state by disease, it made of him an inferior being. The sick man received consideration from society as long as he was capable of being helped; the most practical course was to take a weakling and destroy him. And this was done often enough. The sick man in Greek society was not burdened with an odium of sin, but one of inferiority.\(^54\) The split between the elements of magic, religion, and rational medicine was complete from the sixth century Greek life. "The 6th Century B.C. marks a turning point not only in the history of Western thought but also in the history of medicine."\(^55\) Rational systems of medicine developed that consisted not only of crude empirical facts, but also some attempts to interpret the nature of health and disease. Greek genius found its unique position in the history of medicine because it succeeded in liberating itself from magic and mythology when it approached the problems of health and disease.\(^56\)

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In spite of the development of rational medicine, elements of magic and religion have survived through each succeeding civilization. For the Greeks the rational element was dominant and religious medicine remained in the background to satisfy the mystical desires of a minority. While the Greek philosophers and physicians pondered over the nature of disease, there were still many people who interpreted illness in religious terms and sought healing in the temples. Religious medicine gradually culminated in the healing cult of Aesculapius who, according to Homer, was the son of Apollo. Originally he was the physicians’ patron, but he was exalted and deified. Psychagogic therapy was an indispensable part of the ritual in the temples, for it was imperative to induce in the patients an ecstatic experience in order to awaken the curative power of the soul, and thereby restore the harmonious relation between it and the body.57 Not only nervous but also some organic diseases may be greatly improved if not cured by suggestion and other forms of psychotherapy. This should be considered before dismissing this form of healing as an extreme form of religious imposture. The help the patient received from this treatment was directly related to the fact that he believed in it.

It was during the time of Hippocrates that the beginnings of the theory of the four cardinal humors was advanced as an explanation for disease and health; this theory was to exert a tremendous influence over medicine for the following two thousand years. The four humors were: blood, originating in the heart; phlegm, in the brain; yellow bile, in the liver; and black bile, in the spleen. This theory was further developed by Galen and still more by the Arabs particularly in the eleventh century, A.D. It was a highly workable theory and explained a great deal. Each humor had elementary qualities; i.e., blood was hot and moist like air; phlegm, cold and moist like water; yellow bile, hot and dry like fire; and black bile, cold and dry like earth. When the humors were normal in quantity and quality and well mixed, man was in good health; when however, one humor came to dominate in an abnormal way, the balance was upset and the individual was sick. The practical consequence was that physicians were taught to direct the treatment so as to assist the innate healing power of the body. The theory of the four humors

could also be used to explain the various constitutional types of men; for example, if black bile dominated, the individual belongs to the melancholic type. This theory of disease causation was not the only one in antiquity; it was fully developed at a later date and reached its greatest influence during the Middle Ages. There were other schools of physicians, especially the Empiricists, who pointed out that the purpose of medicine was to cure sick people, and that doctors belonging to very different schools still procured the same results.  

Music in Greek Society

The Greeks appear to have attached more importance to the art of music than any of their other arts, that is if the amount of writing about music can be considered as valid proof of their veneration for it. The theory of music was formulated in the fourth century B.C. by Aristoxenus of Tarantum and influenced musical thought through the Middle Ages, but the leading role of music in the arts is revealed by the great respect and consideration it received from the leading philosophers and writers of the time. The role of music in the aesthetic and ethical aspects of Greek life was so great that an educated man was called a musical man, and an uncouth individual was considered as an unmusical man. Music was not left to the poets and musicians, but was deemed an affair of the state. The study of music was denied to slaves since it was considered to be a privilege of the nobility and it figured strongly in the education of the Greek aristocracy. For the Greeks music was primarily a moral and ethical force rather than just entertainment or a part of the religious rituals although it had a considerable part in them. The extraordinary interest of the Greeks in their music is related to the “doctrine of ethos.”

The doctrine of ethos eludes definition in English, but we shall understand it better if we note the emphasis which the Greeks placed on the effect and influence of music on the will. According to their writers the will can be decisively influenced by music in three ways. It can spur to action; it can lead to the strengthening of the whole being, just as

59. Lang, op. cit., p. 2.
60. Lang, op. cit., pp. 12–16.
it can undermine mental balance; and finally, it is capable of suspending entirely the normal will power, so as to render the doer unconscious of his acts.61

Plato's insistence upon a deliberate program of education which stressed music and gymnastics is based upon his ideal form of human existence, the "man beautiful and virtuous." He emphasized the necessity of sound interaction between mind and body. This ideal harmony of mind and body is not merely an individual accomplishment; it also extended to the realm of cosmic metaphysics—man in harmony with the universe. The Greek ideal of virtue, arete, as applied to man would not only be a moral value, but "man beautiful and virtuous" and efficient. The Greek emphasis on the practical uses of their arts is too often overlooked; an article or idea did not have virtue unless it was both good and useful. Music and gymnastics, for Plato, would harmonize the body and the soul; but music should precede gymnastics because the soul enlivens the body. Music should be a powerful force to harmonize the body with the mind, aesthetic with moral demands, and the more instinctive drives with intellectual maturity. Here lies, for Plato the deepest sense of gymnastics and music; they both aim at a cultivation of the body and the emotions, as the foundation upon which to build later a sound intellectual life.62

Not only did Plato believe that music and gymnastics were important, but he stressed the maintenance of a proper balance between them; in addition, it was important that music be carefully regulated and controlled.

For a change to a new type of music is something to beware of as a hazard to all our fortunes. For the modes of music are never disturbed without unsettling of the most fundamental political and social conventions . . . .63

Although some critics, particularly the Epicureans and sceptics questioned the moral values of music, Plato's discussion of the relation between the modes of music and the modes of feeling are more or less indicative of the prevalent opinions of the day.

“What, then, are the dirge-like modes of music? . . .” “The mixed Lydian, and the tense or higher, Lydian, and similar modes.” “These . . . we must do away with. For they are useless even to women who are to make the best of themselves, let alone to men . . .” “What, then are the soft and convivial modes?” “There are certain Ionian and also Lydian modes that are called lax.” “Will you make any use of them for warriors?” “None at all, but it would seem that you have left the Dorian and the Phrygian.” “. . . but leave us that mode that would fittingly imitate the utterances and the accents of a brave man who is engaged in warfare or in an enforced business . . .”64

As a follower of Plato, Aristotle supported many of the same philosophical concepts prevalent during that time; however, being more of a scientist, his views on the influence of music on character are presented somewhat differently and reflect a later development of Greek thought on music. Particularly, this involves the question as to whether participation in the performance of music is necessary. While not taking a strong stand against the study of musical performance, he stresses, rather, that the proficiency be only great enough to develop a critical understanding of music. For him, music has three functions:

For it is not easy to say precisely what potency it possesses, nor yet for the sake of what object one should participate in it—whether for amusement and relaxation . . .; or whether we ought rather to think that music tends in some degree to virtue (music being capable of producing a certain quality of character . . .;) or that it contributes something to intellectual entertainment and culture.65

He also discusses how music serves as “catharsis” in some souls and how its melodies serve for both education and purgation; he suggests that the ethical melodies be used for education and the active and passionate kinds for listening.

. . . for some persons are very liable to this form of emotion, and under the influence of sacred music we see these people, when they use tunes that violently arouse the soul, being thrown into a state as if they had received medicinal treatment and taken a purge; the same experience must

64. Ibid. iii. 10; pp. 247–249.
come also to the compassionate and the timid and the other emotional people generally in such degree as befalls each individual of these classes, and all must undergo a purgation and a pleasant feeling of relief; and similarly also the purgative melodies afford harmless delight to people. . . . but for education, as has been said, the ethical class of melodies and of harmonies must be employed. And of that nature is the Dorian mode, as we said before; but we must also accept any other mode that those who take part in the pursuit of philosophy and in musical education may recommend to us.66

Although Rome borrowed freely from Greek culture and assimilated other foregoing influences in music, she also adapted, blended, and developed what other nations had to offer. The musician held a place of honor in Roman society; in the list of trade guilds that the Roman people were traditionally divided into, the pipers came first. In addition to its functional use on the battlefield by the military, music accompanied every important occasion both in public and private life. The Romans had a mania for novelty and large scale entertainment. Despite the amount of ensemble playing known to have existed, it was the soloist, the brilliant virtuoso, who caught the fancy of the public. Although amateur vied with the professional in musical practice, there was always a gap between them in the social structure.67

Therapeutic Aspects of Music in Antiquity

In the civilizations of the Hebrews, Babylonians, and Egyptians the close relationship between music and medicine is clearly apparent, since they both were infused by the religious philosophy that prevailed in the cultures of these peoples. The account of David’s playing of the harp for King Saul during his attacks of melancholy has been repeated innumerable times. This account from the Old Testament of the Bible does not necessarily attribute miraculous powers to the music, but it does serve to illustrate the belief held by the Hebrew people that music had the power to affect the emotions and feelings of individuals. The music

66. Ibid. vii. 9–11; p. 673.
that was part of the temple rites of the Egyptians and Babylonians also served when medical aid was sought through healing rituals. The incantations of the medical papri were to be emitted with the proper "voice" and contained the elements of music. The fact that the rituals were not to be varied made them more comprehensible and communicative to the hearer.

Diserens and Fine 68 define the difference between the magical approach and the religious approach to healing as the contrast between an aggressive approach to drive out illness and a submissive attitude seeking relief through supplication and entreaty of the deities. The efforts to appease or persuade the gods must at all time assume a communal form, which in turn helps to determine the individual behavior of the believers. Music is used to bring about a like-mindedness on the part of the group, to enhance suggestibility, and to lull or abolish criticism.

While it is possible to present two contrasting theories of disease in the life of the ancient Greeks, the rational and the mystical (religious); it is apparent that in practice they are intermingled depending upon the philosophy of the individual sufferer and the circumstances of the illness. The use of music along with rational methods of medicine as practiced by Hippocrates and the Empiricists contrasts with the religious-mystical system practiced by the followers of the "cult of Aesculapius." The prevailing belief in the ethical and moral powers of music to bring man into harmony with himself and his universe were no doubt utilized in many illnesses that had a psychosomatic genesis.

There are accounts from Asclepiades, the Roman physician, who calmed seditious mobs through a change in the music or the playing of a particular type of music. The cure of insomnia was believed to be aided by hearing harmonious strains of music from a distance; Asclepiades also treated insanity through the medium of harmonious sounds. Xenocrates used the music of the organ with like results. Caelius Aurelianus used the Phrygian key to treat dejection at one time and rage at another since it is both pleasing and stimulating; the Dorian key was to be played for those who were affected with laughing and childish giggling. It was generally believed that music was a cure for snakebites. There was also the general belief that music was effective in combating pestilence; the ancients recognized that a downcast

spirit with its resulting fatigue might predispose the body to
disease while a relaxed, joyful frame of mind strengthened its
resistance. Capella asserted that fevers were healed with music
as well as wounds. Persons subject to sciatica or lumbago would
be free from its attacks if the flute were played in the Phygian
mode over the area affected. Galen recommended music as an
antidote to the bite of vipers and scorpions.\(^69,70\)

It may be assumed then, for the ancient Greeks and later the
Romans, the use of music as a therapeutic agent was closely allied
with the particular type of treatment employed, rational or mysti-
cal (religious). For the physician who employed rational meth-
ods in the treatment of diseases, music became an adjunct in the
over-all course of the treatment since there was a very strong
orientation toward the use of music for moral and ethical pur-
poses. Where there was a strong suggestion that music provided
a cure for a disease or disorder, it is more often linked to temple
cults of healing or to events where the propitiation of the gods
had become important to secure relief from disease and to regain
health. As Henderson\(^71\) points out music was like a second lan-
guage to the classical Greek minds, capable of expressing the
passions and emotions of the people. This is, perhaps, unparal-
leled in Western culture, but certainly it is the antithesis of the
idea of music as a closed world existing for its own sake on its
own terms. It was like all Greek art, \textit{mimetic} or representative, a
direct photography, as it were, of mental objects formed by the
\textit{ethos} and \textit{pathos} of the soul.

The Romans took over much of Greek culture including the
religious figures and the approach to the power of music to in-
fluence behavior; however, in Roman civilization music continued
the decline that began in later Greek antiquity—the trend away
from the moral and ethical purposes held during Plato's time to
more emphasis on the sensuous and emotional effects of music.
Ostentation and display in entertainment were more prominent
features of the Roman art than any moral or humanizing effect
the music might have had.

\(^{69.}\) Meinecke, \textit{op. cit.}, pp. 70–85.
\(^{70.}\) Diserens and Fine, \textit{op. cit.}, pp. 145–150.
While the belief in the power of music to affect behavior and therefore have value in therapy continued to influence civilization throughout the Middle Ages and the Renaissance, the methods of its use by the Romans contributed much toward the Christian Church's ambivalence toward music and the other arts of the pagan world. Lang\textsuperscript{72} states that the doctrine of ethos did not vanish, but going through various metamorphoses, continued to live into the Christian era.

**Music and Medicine in the Middle Ages**

The Middle Ages as an era in the evolution of civilization represents the link between the ancient world and modern times. After the tragic decline of the Roman Empire because of its lack of internal strength and spiritual substance, a new religion, Christianity, came from the East to become the dominating factor in Western Civilization for the next ten centuries. No exact date designates the beginning or end of the Middle Ages, but in general, this era dates approximately from the fifth century through the fifteenth century; from the decline of the Roman Empire to the Renaissance.

Christianity introduced the most revolutionary and decisive change in the attitude of society towards the sick. It came into the world as a religion of healing, a restoration both spiritual and physical; it taught that disease was not a disgrace or a sin, nor was the sick man an inferior. When Christianity became the religion of the state, society assumed the obligation to care for its sick members. The sick man assumed a preferential position which has been his ever since that time. However, attitudes that prevailed before the Christian era were never entirely overcome; for this reason, disease in many instances was still considered a punishment and a sin.\textsuperscript{73} Coleman points out that mental illness was associated with demonology. Many of the crude, harsh measures employed for the treatment of the insane were the reflection of the belief that a demon had gained control of the sick person and this demon had to be exorcised.\textsuperscript{74}

Although Greek medicine was a pagan art for which there was

\textsuperscript{72} Lang, op. cit., p. 46.
\textsuperscript{73} Sigerist, op. cit., pp. 65–71.
no room in the Early Christian Church, gradually however, a reconciliation took place. When Christianity became the official religion of the Roman state, it had to compromise with necessity by taking over the cultural heritage of the past. The rational medical systems of antiquity were saved, but for centuries little progress was made because religious medicine was close to the people. Elements of faith healing have survived through all ages. Today the American doctor is a physician of body and mind alike; he cannot underestimate the importance of social and psychological factors in the genesis of disease and its treatment.75

Music in the Early Christian Church

At the beginnings of the Christian Church, the leaders of the Church were not too accepting of music because of its pagan associations. Music, however, was all around the Church and it had to take notice of it. St. Augustine's reflections on the effects of music are typical of the problems that confronted the leaders of the Church about its inclusion in the divine services.

... I perceive that our minds are more devoutly and earnestly elevated into a flame of piety by the holy words themselves when they are thus sung, than when they are not; ... 
... Not withstanding, when I call to mind the tears I shed at the songs of Thy Church, at the outset of my recovered faith, and how even now I am moved not by the singing but what is sung, when they are sung with a clear and skillfully modulated voice, I then acknowledge the great utility of this custom. ... Yet when it happens to me to be more moved by the singing than what is sung, I confess myself to have sinned criminally, and that I would rather not have heard the singing.76

The Greeks had regulated and controlled music as a function of the state for the ethical and moral growth of the citizen; the Church now assumes the task of molding the nature and use of music to avoid pernicious influences on men's souls. That there existed considerable secular and profane music can be ascertained by the manner and the number of times the Church Fathers spoke against it.77

77. Lang, op. cit., pp. 54–57.
The first period of the Christian Church music closed with the reign of Pope Gregory the Great. Through the Gregorian reforms in music, Rome became the undisputed center of the development of church music and music in general.

Gregorian chant is not merely a form of music, it represents an epoch; it occupied an enormously important position not only in the history of arts and letters, but in the history of civilization. For centuries it was the only kind of music officially known, taught, and practiced... Gregorian chant spread, carried by the ambassadors of the Holy See, all over the Christian world and entered into conflict with the life, religious rites, and music of the people. It sought to suppress everything else, or at least to assimilate the indigenous... it ended by triumphing, and gradually plain chant absorbed all other music.78

The prestige and spread of the Roman plainsong is important not only in the historical development of music as an art but in its use as an educative and integrative instrument in the spread of the Christian faith. Music was therefore not only used to attract listeners, but plainsong provided a form of universal language to assist in the propagation of the faith.

Music as Therapy in the Middle Ages

Throughout the scholastic Middle Ages, art was considered to be the servant of the Church. The scholars took Pythagoras as one of their principal figures from antiquity; their theoretical writings show a preoccupation with symbolism and number mysticism rather than with sounds and melodies. By contrast, the theologians were quite cognizant of the power of music; for them, heathen music was diabolic and the faithful had to be protected from its influences. Thus a similarity to Greek thought becomes apparent—music must be carefully regulated and molded by the Church otherwise association with profane music would have a deleterious effect on the hearers, especially on the young people.

In the prevailing atmosphere of music for every occasion whether for solemn public ceremonies, private receptions, or music to accompany the armies that went to war; it is to be expected that the use of music for therapeutic purposes would be

78. Ibid., p. 77.
the rule rather than the exception. Music was not silenced even during the worst of the plague according to the accounts of music in daily life from the Decameron by Baccaccio.

The theory of the four humors continued to develop during the Middle Ages and this philosophy of disease provided a common ground from which medicine and music functioned. That there was a strong belief in the power of the various modes to influence behavior is indicated by a letter written by Cassiodorus to Boethius in the fifth century, which contains a rather complete enumeration of the powers of music. The Dorian mode was considered to effect chastity and honor; the Phrygian stirred fighting and engendered wrath; the Aeolian mode calmed the tempests of the soul and lulled the calm soul to sleep; the Lydian mode soothed the heavy cares of the soul; and the Iastic mode sharpened dull insight and directed the profane mind toward heavenly aspirations. 79

The theories of music therapy practiced in antiquity continued to be advocated during the Middle Ages. The scholars and philosophers of this era venerated the ancients and accepted the use of music in therapy as part of the teachings of antiquity. Religion influenced all phases of life during the Middle Ages; medicine was thus largely religious medicine. Sigerist 80 gives examples of hymns that were used as remedies for colds; music was composed in honor of the saints who protected mankind from illness. Whenever persons of high rank were ill, it was the custom of the court musician to write special compositions for them, if not to help them, then at least to cheer them during their suffering.

One unusual example of the use of music as therapy appears in contemporary and later accounts of the malady known as "tarantism," which according to popular belief could only be relieved or cured by music and dancing. It took the form of a dancing mania that was precipitated by the bite of a tarantula; the only cure according to tradition was wild dancing until the poison was eliminated. One of the interesting facts about the symptoms was that not only the immediate sting of the tarantula caused the dancing mania, but past experiences of the disease could be reactivated as well. Although individual cases seem to have been reported in other sections of Italy and Spain, it was

79. Leichtentritt, op. cit., p. 53.
generally localized in Apulia, a very hot region in the heel of the Italian boot. The bite of the tarantula seemed to be virulent only in this area; it seemed to be most aggressive in its attacks on the people during the hot days of July and August when musicians were about the countryside and villages. Bands of musicians conveniently moved throughout the region to provide the necessary antidote to these strange attacks. That the malady could only be cured by music and dancing seems to have been quite generally accepted at that time. Many physicians studied the disease, but the usual cures for bites of scorpions or venomous insects did not seem to relieve the symptoms; music appeared to be the only cure. In more recent years the disease has been dismissed as a myth based on hearsay. However, the explanation that would appear closest to the truth is that it was a form of neurosis or a nervous disorder. There is a direct analogy between the symptoms of the dancing mania and the rites performed at festivals for the old Greek deities such as Dionysos, Cybele, Demeter, and others. Christianity came late to this region and many of the pagan rites were deeply rooted and never completely supplanted by the Christian festivals and religious celebrations. It is not surprising that some of the old pagan rites appeared in the form of the symptoms of the dancing mania that had its roots in a neurosis peculiar to that area.81

It is also possible that the rigorous control exercised by the Christian Church forced the population to refrain from practicing the old pagan rites in which they had participated for centuries. These practices were probably never entirely forgotten or suppressed; they erupted in the form of the dancing mania. In this fashion the victims were not taking part in pagan practices, but were displaying uncontrollable symptoms of a disease which could only be alleviated by music and wild dancing.

Music and Medicine from the Middle Ages to the Twentieth Century

Music and Medicine During the Renaissance

The scientific approach to medicine had its beginnings in the Renaissance with the study of anatomy taking a central position; the pathological method in physiology came into being during the eighteenth century, and clinical medicine developed in the

81. Ibid., pp. 98-116.
early nineteenth century. The one field that was not influenced by these scientific approaches was therapy: traditional methods of treatment remained in practice. As a whole, the treatment of disease in the early nineteenth century had not progressed much beyond that of Hippocrates and Galen.82

Both Carapetyan83 and Sigerist84 discuss the treatment of disease during the Renaissance in terms of the classical theory of the four humors. This theory was stimulated by the general tendency of all areas of learning to look toward antiquity for inspiration and knowledge. Paramount at this time was the pervading idea of the unity of knowledge; the most divergent fields of human activity were often brought together. The Renaissance man was the product of an age that tried to integrate all knowledge and the arts. This accounts for the musical theorist who writes of the medical and musical relationships concerning disease and health, and the physician who describes the values and effects of music in treatment.

The physician of this era was often a cultivated man outside his own specialization, with tastes for the arts and literature. This interest in antiquity resulted in the theory of the four humors derived from the Greeks becoming a point of contact between music and medicine, functioning in both medical and musical theory. The theory of the four humors, the corresponding four qualities of matter, and the resultant humoral pathology had prevailed for over two thousand years since its beginning with Hippocrates. The Empedoclean theory ascribed all material existence to the various mixtures of the four elements—air, water, fire, earth. To these four elements corresponded in medical theory, the four humors in the body—blood, phlegm, yellow bile, and black bile. Out of this came the four temperaments—sanguine, phlegmatic, choleric, melancholic.85

Just as medicine set forth the four component elements or humors of the body, the theories of music set forth four musical elements and related them to cosmic elements. These elements

82. Sigerist, op. cit., p. 171.
84. Sigerist, op. cit., pp. 131–146.
85. Carapetyan, op. cit., p. 121.
formed a harmony in music just as the four humors formed a harmony in the body in good health. These four musical elements were the soprano compared with fire; alto, air; tenor, water; and the bass with the earth. This may appear whimsical to modern interpretations, but a perusal of the writings by scholars of that era and later decades indicates that it received serious consideration. Every era has its skeptics who are dissatisfied with the traditional viewpoint, and this theoretical construction was attacked by Paracelsus, who devised his own theory and philosophy of medicine.86

The analogy of the four humors was extended to include the four musical modes or scales in use during this time, which in turn were compared with the four elements of nature; the four modes also corresponded with the four temperaments. The Dorian mode is compared with water and phlegm, constituents of the phlegmatic temperament; the Phrygian with fire and yellow bile, the choleric temperament; the Lydian with air and blood, the sanguine temperament; and the Mixolydian with earth and black bile, the melancholic temperament. This type of correspondence was typical of the Renaissance ideal of unity, proportion, and harmony.87

Medicine itself restored in the Renaissance the Greek view that disease was merely the temporary disruption of a harmonious state in the body, in contrast to the medieval view that it was punishment for sins. In terms of the humoral theory this harmony meant the right balance between the four humors, which, if disturbed, resulted in disease. It may be said that while medicine utilized a concept more commonly known in music, musical theory in turn borrowed from medicine by defining harmony in music in exactly the same terms by which medical theory defined the harmony that was health. That is, harmony consisted of the right relationship between the four musical elements already mentioned, with emphasis on the fact that the word harmony would be meaningless if it did not signify a bringing together of elements totally different from one another, whether in the cosmos, in the human body, or in music.88

Music occupied a position in the life of the man in the Renaissance that usually is not taken into proper account by historians.

86. Ibid., p. 122.
87. Ibid., pp. 122–123.
88. Ibid., p. 123.
The education of the “universal man” included music as matter of necessity. Every monarch of note was interested in music; and many were capable and skilled performers. The chapel choir and the court musicians were essential parts of a king’s retinue; they even followed their monarchs to war. This vogue of social music with participation by amateurs that flourished during this period had a spirit unknown to the twentieth century musical world.

The seeking of beauty and enjoyment, long established in the fine arts, now permeated music; and the Renaissance witnessed the advent of a music-loving public whose musical interest was not consumed in going to church for Mass, or in listening to the accompaniments of solemn processions, or in table entertainment: they attended musical performances organized for the sole purpose of enjoying music, and often joined the ranks of the performers. ⁸⁹

**Therapeutic Aspects of the Music of the Renaissance**

The therapeutic qualities of the music of this age were included in the larger area of the effects of music; the effects of music are mentioned in almost every musical work, and they are included in many treatises written by scholars in other fields. Zarlino, who is often considered the spokesman for sixteenth century musical theorists, discusses the indispensability of music to medicine. It is a necessary art in order that the physician be able to judge the right proportion between cold and warm, and to judge the human pulse rate; music is the best training for the sense of rhythm needed to discern irregularity in the rate of the heartbeat. ⁹⁰ He also stresses that during the Renaissance interest was centered on man himself; scholars might have their special interests and their focal points would vary; however, “Zarlino, a musician, and Vesalius, an anatomist, both speak of the harmony of the mind, the harmony of the body, and the harmony of the interrelation of mind and body.” ⁹¹

Because of the great veneration for the culture of antiquity, most of the therapeutic qualities of the ancients were accepted with the addition of new ones. There was, however, a question in the minds of many musicians and theorists as to why the con-

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temporary music of their time did not always yield the marvelous effects ascribed to music by the ancient writers. Many artists designated contemporary music as being inferior in quality, and therefore, sought to write music in what they supposed might be the style of the ancient Greeks. For the Renaissance physicians the effect of music on the mind was appreciated in a way peculiar to their profession; music was used as an adjunct in the practice of preventive medicine. It was included among the emotional factors which favored resistance to disease; a resistance that was threatened by the great epidemics of the time. Cappeyan goes on to say that “these factors, classed under the ‘accidents of the soul,’ are as valid today in the light of modern knowledge as they were then. On the positive side they can be beneficent, while of the negative side they can be harmful and even conducive to illness.” Therefore, anger, excessive sorrow, and worry must be avoided, while hope and a positive attitude were to be encouraged. Medical advice against the plague would, therefore, stress a happy state of mind and the desirability of social recreation and listening to music.

The 16th century writer treated the problem of the effects of music in terms of the moral and spiritual effects, and of the effects on the body through the passions. The older accidents of the soul now become the passion and affections of the soul.

It may be assumed that certain effects of music that were believed to be therapeutic were actually practiced, and within the context of the times were, no doubt, effective. In the Decameron most of the days’ activities ended with singing and dancing while many of them began with it. “After this they sang sundry other songs, and danced sundry dances and played upon diverse instruments of music.” This closed the second day while the third day begins with a gathering in a particularly beautiful setting. After the guests had viewed their surroundings, “the queen let set the tables around the fair fountain and at her commandment, having first sung half a dozen canzonets and danced sundry dances, they sat down to meat.”

92. Ibid., p. 129.
93. Ibid., p. 130.
95. Ibid., p. 167.
The Reformation of the Sixteenth Century

The Reformation movement which had as its consequences the establishment of the Protestant churches, is not essentially a result of the humanistic spirit of the sixteenth century; it can be considered more as a parallel development. The musical spirit and subsequent activities that accompanied the Reformation are important not only in terms of the use of music by the leaders of the Reformation, but also because of the far reaching influences in the future development of the musical culture of primarily Protestant countries. Music as an art and a social instrument was embraced and adapted to the needs of the Lutheran reformation; it was shunned by the Calvinist tradition for many of the same reasons that had troubled the leaders of the early Christian Church. If the medicine of a period is influenced by the social institutions of the age, as suggested by Sigerist, the Reformation marked a return to the simplicity of life of the early Christian community. The cult of the saints, the worship of relics, the pilgrimages to holy shrines, and other elaborate rituals of religious medicine were discarded in favor of the simple prayer of the individual. If he had faith, he had belief and hope, and healing was a form of faith healing.

The emphasis of Luther upon music and his stress upon congregational singing found a natural affinity with the songwriters of the German middle classes. Luther himself enjoyed music and was proficient as singer and composer. Notwithstanding his own love of music, music had its first loyalty and devotion to the Church. He regarded music not only for its intrinsic value, but primarily as a means of education to make the youth more receptive to the Gospel of Christ. Religious considerations for the use of music came before aesthetic ones. His endeavors to establish congregational singing harked back to the hymn singing congregations of the early Christians. It was his hope to bind worshipers together through song; music again was to become the servant of the Church.

As Bainton reports, Luther was able to inspire the use of music in the liturgy and by congregational singing because his own enthusiasm for music was so great. Next after theology, he

96. Sigerist, op. cit., p. 143.
gave music the highest praise and greatest honor. Music was to be praised as second to the Word of God, because by it all the emotions are swayed. Not the least merit of music, according to Luther, is that it is not contentious. While Luther was not adverse to adapting secular songs for congregational singing (he is supposed to have asked why the Devil was entitled to all the good tunes), the Calvinists pruned away anything that might suggest any adverse association or have any corrupting influences. It appeared to Calvin that music "unless safeguarded by a soundly orthodox text was more likely to act as a seduction of the soul than a guide to its needful grace."98 Instrumental music and the singing of some polyphonic settings of the Scriptures were allowed to be practiced in the home, for Calvin recognized that music properly practiced served as a wholesome form of recreation; in the church services, however, only the metrical version of the psalms were sung.99

That the leaders of the Reformation believed strongly in the power of music can be seen by the great emphasis placed upon it by the followers of Luther and the great care shown by the followers of Calvin to avoid any corrupting influences from it. Nor were the leaders of the Reformation the only churchmen cognizant of the role of music during the Reformation. In discussing the political and propaganda value of music utilized through the ages, Paul Nettl writes:

The fact that a song or an anthem can be of the greatest religious or political importance can be shown by Luther's embattled "A Mighty Fortress Is Our God." A Jesuit authority said that it helped destroy more souls than all his other writings and sermons together. Exactly the same power is characteristic of the "Marseillaise" which has become a symbol of liberty, equality, and brotherliness.100

The Catholic Church, aware of the lure of music for the congregations of the Protestant churches, utilized the same power of music in the service of the Counter Reformation that followed this period.

The Period of the Baroque

The period of music history generally termed the Baroque follows the Renaissance well into the middle of the eighteenth century. Stylistically it is a period of ecstasy and exuberance, of dynamic tension and sweeping gesture, an era of longing and of self-denial in contrast to the assuredness and self-reliance of the Renaissance. The musical thought of the Baroque was supplied by the doctrine of affections; the affections being identified with the content of the music. As the Renaissance faded, the influence of the Counter Reformation of the Catholic Church gathered momentum, and the great art and music that remained were drawn into the orbit of the new religion. "The fusion of the spirit of the baroque with that of the Counter Reformation, taking place in Italy, soon gained the whole of Catholic Europe, and in whatever country or form the coalition appeared, the leadership was always yielded to the latter."102

The noted scholar, Kircher, is a source for the scientific formulation of the doctrine of temperaments and affections. According to him, melancholy people like grave, solid, and sad harmony; sanguine persons prefer dance music because it agitates the blood; choleric people like agitated harmonies, because of the vehemence of their swollen gall; while those of phlegmatic disposition lean toward women's voices because their high-pitched voices have a benevolent effect on the phlegmatic humor.103

The subject of philosophy was man, the conditions of his mental life, the power of his affections, the divergent character of individuals and nations. Unlike theoreticians and historians of later centuries, the musicographers of the baroque did not define music and its style by objective-technical precepts, but saw it as conditioned by the diversity of man's bent of mind. Rationalists sought in music as in other arts, the "imitation of nature," not tone painting as such; the musical thought was foremost concerned with rendering and translating into music the temper, disposition, or frame of mind—the passions and mental reactions characteristic of man. These cannot be understood as words that today are applied to mild feelings, but which formerly stood for the

strongest emotional expressions, distinct from "passions." One of the main objections to instrumental music was that it was not so clearly able to express the affects.\textsuperscript{104} Additional reviews of treatises and contributions by both musicians and physicians on the power of music to affect the nervous system are given by Carapetyan who writes:

But from the 17th century on, the purely psychological effect of music and the effect on the nervous system are clearly brought out. On the other hand, until the 19th century we still find discussions attempting to explain the traditional effect of music on mind and body, and in the 18th century especially, many works, not a small part of them by professional physicians, are devoted at least in part and often entirely to the effects of music on disease.\textsuperscript{105}

Music continued to hold a foremost place in all levels of society. It has already been mentioned that the Counter Reformation utilized the arts and especially music, to engender a tremendous sense of awe and grandeur into the spirit of the new Church movement. There was an "occasional quality" to music of the middle classes whose gain in wealth and social position demanded that all events be celebrated by an appropriate musical offering or works of art. The arts had an intimate contact and a close relationship with the events of life that is too often overlooked from the perspective of present-day historians. This musical life of the rising middle classes was strengthened by the choral societies and organizations that developed not only in Germany, but also in England. The musical life of the Elizabethan period is well known for its utilization of music in every phase of daily life.\textsuperscript{106}

\textbf{The Therapeutic Aspects of Music During the Baroque}

The application of music for therapeutic purposes was a natural aspect of the general theory of disease causation, the theory of the four humors, which was the common ground where music and medical theory met. The many references to the effects and the power of music that are found in the literature of the period give evidence of the strength of this theory in everyday thought and

\textsuperscript{104} Ibid., pp. 435-439.
\textsuperscript{105} Carapetyan, \textit{op. cit.}, p. 145.
\textsuperscript{106} Lang, \textit{op. cit.}, pp. 355-407.
practice. The effect of music on human behavior is presented by Yearsley\textsuperscript{107} as he reviews some of the English literature of the period. In Spencer's \textit{Faerie Queene}, there are numerous allusions to the therapeutic effects of music as when the wounded knight is beguiled by music which helps to alleviate his grief and agony; it can also be a comfort for the melancholy. In Shakespearean plays there are such references as:

That man that hath no music in himself,  
Nor is not mov'd with concord of sweet sounds,  
Is fit for treasons, stratagems, and spoils;  
\textit{Merchant of Venice}, V., I., 83–88

To know the cause why music was ordained!  
Was it not to refresh the mind of man  
After his studies or his usual pain?  
\textit{Taming of the Shrew}, II., i., 10–12

This music mads me; let it sound no more;  
For though it have holp madmen to their wits,  
In me it seems it will make wise men mad.  
Yet blessing on his heart that gives it me!  
\textit{Richard II}, V., v., 61–63

Music is also used by the physician in \textit{King Lear} to calm the old King (\textit{King Lear}, IV., vii., 25); and its soothing effect is also prescribed for King Henry the IV (\textit{King Henry IV}, Pt. 2, V., iv., 132). Many other examples may be drawn from Shakespeare which indicate the power of music to influence human behavior.

In his remarkable study of morbid psychology Burton gives attention to the effects of music. He reviews most of the usual accounts of the effects of music as presented in antiquity and states that it has excellent powers for repelling diseases; he stresses particularly that it is a sovereign remedy against melancholy. His explanation for all this is that "the spirits about the heart take in the trembling and dancing air, they are moved together and stirred up with it," or else, "the mind as some would suppose, harmonically composed, is roused up at the tune of the music."\textsuperscript{108}

Carapetyan\textsuperscript{109} in his review of the treatises and dissertations on

music in medical treatment lends additional weight that as an aid to treatment, music received serious consideration from musicians and physicians. Some writers were concerned about the dangers inherent in the power of music as well as the effects derived from it. The general philosophical orientation toward the theory of the four humors and four temperaments plus the stress on the affections and passions in music provided a common ground for music and medicine.

**Music and Medicine from the Late Eighteenth Century to the Twentieth Century**

During this era it can be observed that therapy or the treatment of illness and disease begins those changes which during the twentieth century will appear as the scientific method in the treatment of disease. Since no social phenomena, including medicine or art, exist outside the general intellectual and social atmosphere of an age, it becomes apparent that as musical practices and thought develop throughout this era, they are increasingly influenced by the scientific spirit of the times.

Sigerist\(^{110}\) points out that medicine in its broadest sense has always been composed of two elements: craft and theory. The procedures and practice of surgery and the use of drugs represent the empirical line of development. Gradually in the late nineteenth and early twentieth century therapy began to reflect the many discoveries in anatomy, surgery, bacteriology, and biochemistry; scientific discoveries and methods were incorporated into the treatment of disease. The knowledge in the various areas of medicine no longer only seek to explain the causes of disease, but they endeavor to treat and prevent them. Medicine has made a long journey through magic, religion, and philosophy to reach the scientific stage.

In the late eighteenth century the baroque blends into the style of the Affecktenlehre or Empfindamerstil, the chief aim of which is to portray certain typical emotions, such as the tender, the languid, the passionate, etc.\(^{111}\) The Empfinsamkeit, which departed from the baroque ideal of a single affection now concerned itself more with tempo and dynamics, the delineation of many contrasting emotions, and the fine nuances that are now

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indicated in the score. The emotional quality of the music, the mood, is often indicated by tempo and dynamic markings. The emphasis now centers upon expressiveness; music must be more than sensuous stimulation, it has to have expressive aims.\textsuperscript{112}

The extension of the power and influence of the middle classes continued during this era. There was a growth of the caste system, and the position of the musician sank to a low ebb, except in Italy. As the bourgeois advanced, its claims brought about another form of music making, the public concert. Many of the earliest concerts were first held in private establishments. The growing mass of music consumers changed the whole aspect of musical life. One of the most significant elements in the new musical life was the growing group of musical amateurs. As the scores carried more instructions with less room for improvisation, the technical abilities of the amateurs increased, but their universal musical education decreased. Also, the former universally orientated musician who improvised, composed, and wrote technical treatises on the theory and art of music was gradually replaced by the specialist: the composer, the conductor, the performer, the critic, and the historian. Also introduced was the new factor of the passive participant, the listener. The musical scholarship preceding the mid-eighteenth century tended toward mathematical-philosophical speculation; it now moved toward the critical appraisal of published compositions and their performance.\textsuperscript{113}

As in the field of medicine with its search for answers and its gradual specialization, musical culture also moved from the idea of universal knowledge to specialization and the quest for answers in a rational manner.

\textit{Developments in the Field of Music During the Nineteenth Century}

According to Lang,\textsuperscript{114} the romantic lived for the subjective, but it was widened from the individual to the social; he created subjective universalism. While the romantic is a universal phenomenon of all times, the essential spirit of the romantic was dominant during the early part of the nineteenth century. Romanticism did not suffer mere reality, full, true reality; fantastic seeing and

\begin{enumerate}
\item[112.] Lang, \textit{op. cit.}, pp. 587–590.
\item[113.] Lang, \textit{op. cit.}, pp. 719–733.
\item[114.] \textit{Ibid.}, pp. 734–740.
\end{enumerate}
spiritual experience were its guides. True romanticism evidences the three traits of youthfulness, longing, and intoxication; these are ever-recurring human qualities since antiquity. Romanticism was still alive in the late nineteenth century, but the essence was no longer romanticism. This late romanticism no longer led, it abducted; it ignored the most important problems of life and fled into an atmosphere where life would not challenge it; it became aestheticism. "This is no longer life itself, but an attitude toward life, this neoromanticism is life in a pleasing selection."115 The sentimental vein of the last half of the century often obscured the lyric poetic feelings of the earlier half. The late nineteenth century with its subjectivity, its flight into sentimentality rather than poetic expression, its tendency toward specialization in musical practice and theory, provided the background and the philosophy for the use of music in therapy not only during its own time, but it influenced the early part of the twentieth century to World War II.

Therapeutic Aspects of Music from the End of the Baroque to the Twentieth Century.

While the late eighteenth century still disclosed a great affinity between music and medicine, it was during this period that the divergence of the two fields had its beginning. Not for almost a century was there again to be a philosophy of medical treatment that included the arts, in this case music, in its theory of treatment. This is not meant to imply that music is not continued as treatment throughout this time, but rather that its use as therapy became part of the growing specialization of both music and medical practice. Music as therapy began to be examined more critically, and gradually the circumstances of its use are disclosed in special cases rather than as a part of the general theory and practice of medicine. Examples of the use of music in clinical practice abound, but they tend more and more to indicate the use of music in specific instances as the following examples indicate.

As was mentioned earlier, during this period the music historian made his appearance. Burney116 in his voluminous his-

115. Ibid., p. 739.
tory of music written from 1776 to 1789, reflects the general attitude toward music as therapy during the eighteenth century. He gives the music of antiquity serious attention, devoting an entire chapter to the effects of music in antiquity. He divides his discussion into three sections: first, music’s effect on softening the manners, promoting civilization, and humanizing men; second, its effects in exciting, or repressing the passions; and third, its medicinal power in curing diseases. He reviews most of the classical examples of antiquity already mentioned; however, he determines a rational explanation for them in terms of late eighteenth century philosophy. He cites a contemporary physician Burette, for the effectiveness of music in treatment of sciatica; he suggests that music is effective first, for diverting the attention to relieve pain, and second, by “occasioning oscillations and vibrations of the nerves, which may perhaps, give motion to the humours, and remove the obstructions which occasion this disorder.”

Burney mentions several other authors who write on the use of music in treatment and their explanations follow in much the same vein. It is his opinion that too much stress is placed on the power attributed to ancient music without any proof of its marvelous effects; and that there is a tendency to consider the “modern” music of his time as inferior simply because these same influences on human behavior are not observable. He does not discount the value of music as a therapeutic influence; but he does attempt to give an explanation that is in keeping with the humoral theory of his time. The material that Burney presents is valuable in that it reflects the general tendency of the eighteenth century to accept the use of music as treatment and to attribute to music the effects ascribed to it in antiquity. At the same time, however, it also indicates that those who did not believe in the magical powers of music as such, interpreted its use in medical treatment in terms of the prevailing treatment concepts of the time.

While theoretically music was helpful in the treatment of disease, most of the examples from this period are of special cases such as Phillip V, King of Spain. According to the version from Burney, who was a contemporary of Farinelli, the noted singer, the King was in a total dejection of spirits, refusing to attend the

117. Ibid., p. 158.
Historical Bases

affairs of state or even being shaved and dressed. The Queen having tried every common expedient determined upon an experiment using the effects of music upon the King, who was extremely sensible to its charms. She arranged with Farinelli after he arrived at the court, to present a concert close by the King's apartment; the King responded to the music and asked Farinelli what he wished for a reward. Having been previously instructed by the Queen, he requested the King to allow himself to be shaved and to attend to the desires of his advisors and ministers. From this time the King's disease gave way to medicine, and the singer had the honor of the cure. He continued to sing for the King and the Royal favor increased to where he was regarded as a first minister; yet, he never forgot that he was a musician and instead of bringing envy upon himself, he gained the esteem and confidence of the ministers. Farinelli lived through two reigns at the Spanish court. With the ascent of Charles III, who was not favorably disposed to music, he was pensioned handsomely and spent the remainder of his days in affluent leisure in Italy.¹¹⁸

Hughes¹¹⁹ reports the case of the famous “vingt-quarre violins” of the French court that helped a young wife who had fallen into a melancholy state after a long illness. The musicians played behind a tapestry in her apartment; the music had the effect of driving away the melancholy condition from which she suffered. Hadden,¹²⁰ writing about music therapy in the late nineteenth century, mentions that the eccentric Ludwig, King of Bavaria, who suffered from periodic headaches, often sent for Nachbur to sing selected songs which had a soothing effect upon his Majesty. He also tells of the Prince of Orange, who had three first-rate musicians constantly with him to keep him free of melancholy. Pinel and other French physicians worked with hysterics on the principle that music is conducive to health in addition to the aesthetic and emotional pleasures resulting from participation in the production of music.¹²¹

It is not difficult to find writers on the subject of music in medicine giving accounts of the use of music as therapy; however, few of them give as illuminating an account of a particular case as Burney does. Too many of them merely recount the use of music as therapy relying heavily on Greek thought for their interpretations without differentiating between myth and fact.

From the foregoing discussions of music, health, and disease, it can be assumed that empirical factors have always had a place in the treatment of disease. Those forms of treatment that have proved to be helpful have been continued, and the reasons for their efficacy interpreted in the light of the prevailing concepts of health and disease. It is not improbable, therefore, that there are therapeutic elements which are common to all accounts of music in treatment throughout history.
PART VII
RESEARCH IN MUSIC THERAPY
A BASIC SET OF SIXTEEN DUTCH Handbells was purchased out of Canteen Fund moneys at a cost of $308.00. They were beautifully tuned, hand-turned brass bells with loop leather handles and specially controlled clappers insuring only one strike of the clapper per stroke. Made in Holland, they had to be specially imported and were acquired in July of 1960. Since then, the hospital owning them and (by special permission) a second hospital have used them as the basic equipment of a Music Therapy operation. This study has to do with this activity in these two state hospitals.

Handbell ringing has a long and almost legendary history.1 For centuries before Christ sheet metal bells usually made of iron, sometimes covered with bronze to keep them from rusting and to improve their tone, were employed in identifying and locating animals as they grazed, and in the early Christian church they were used “to frighten away evil spirits, and to perform cures and miracles. Oaths were taken on these bells, and peasants were more afraid of swearing falsely by the bells than by the Bible itself.” These were the forerunners of the cast handbells of today. When the Emperor Constantine became a Christian, and all his subjects with him, in the Fourth Century, the Bishop of Compania suggested that the Christians should be called together by ringing bells instead of the metal horns used by the Romans to announce special meetings and functions, or the shofar which from time immemorial had special meaning for the Jews. From the little Italian province of Compania the science of bell ringing got its name, campanology, and bell towers were known as companiles. In the tenth century, Pope John IX ordered bells to be rung to ward off lightning, and William the Conqueror introduced bell ringing as a signal to cover fires.

We are told that for centuries handbells were rung at funerals, and they are still rung in funeral processions at Oxford University.

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and in parts of Ireland and Scotland. (See Perry, Footnote 1, for a more detailed history.) In 1700, tune-ringing began to appear as bells were made to include semi-tones, and during the middle and late 19th century tune-ringing reached its height in England. Today handbells are being made by British, Dutch, and American founders. The British bells are lighter in weight, the Dutch heavier bells giving out a louder tone. We feel that the Dutch bells have some advantage over the more easily rung British bells, because we can repair them immediately. The British bells have to be sent back to England to replace or repair them, with long delays. However, the set of Dutch handbells which we use have proved very durable and almost fool-proof.

From this preface it will be seen that handbell ringing is an adult avocation, and anything but child's play. One of the men at the very first meeting designed to introduce the handbells reflected the general notion of the patient-group that this would be a childish game unbecoming grown men. This patient went to the window and cried out, “Where's the fish-cart?” as we demonstrated the use of the bells.

HANDBELL RINGING AS A MUSIC THERAPY OPERATION

In Hospital A, weekly meetings, usually held on Friday mornings, have continued for two years. These meetings last from thirty to forty minutes. They are conducted in the special meeting room at the back of the ward where twelve chairs are placed in a semi-circle for the players. The bells are placed on a blanket on a table at the front of the group and distributed to the men after they are finally assembled. The ward personnel has given excellent assistance in setting up the room, gathering the patients, and often sitting in if one or two group members were missing. Every effort has been made to keep the same patients actively associated with the group, although, naturally, new members have been invited to replace those who have left. These changes, however, have been gradual, and the older members have helped in the selection and induction of new members.

In Hospital B, the twelve adult male patients making up the Bell Ringers membership were selected for this activity by the psychiatrist in charge of a rehabilitation project in September 1961. At a preliminary meeting, they were introduced to the bell ringing activity, and they were allowed to reject it if they saw fit, but if they adopted it, it was understood that they would con-
tinue. This group has met every Wednesday evening from 7:30 to 8:15 p.m. in the music room of the Music Therapy quarters which is located approximately three blocks away from the building where these men live. Although we sometimes use a grand piano to accompany the bell ringing in Hospital B, most of the sessions about which this concentrated study is reported were conducted in the same manner as those in Hospital A.

In Hospital A, the patients are in the same building as the one in which the activity is conducted, but in Hospital B, several different conditions prevail. In the latter situation, for many months (prior to the period studied) these patients had to be escorted to and from their ward. Furthermore, the meeting was always held in the evening, while in Hospital A it always occurred during daylight hours. In Hospital B, the patients were deliberately chosen who were manifesting the poorest reality contact, while in Hospital A, although many suffer with various behavior disorders characteristic of schizophrenia, no special effort was made to use such a criterion.

The B group members had lived together in the same ward prior to September, some of them as long as ten years. It was customary to eat supper there about 4:30 p.m. and then be put to bed. But under the new rehabilitation planning, they were required to work each day, and not to retire before 9 or 10 o'clock. The Bell Ringers' Club began to take on a special attraction to these patients as a way of spending at least one of these evening periods.

We have used the same procedure for both groups with a format somewhat as follows: (This has been kept flexible, but usually takes place as listed.)

1. **Opening greeting** by the leader-therapist as he passes out the bells to each member, taking special pains to call each member by name. If a new member appears (in Group A), a point is made of getting his full name and writing it into the club roster, and usually some comment is made about allowing this person to remain in the group for a few weeks on probation "to see how he will do" with the older members.

2. **Ringing the "Change Sequence."** We do not use notation. The therapist sits or stands at the center of the semicircle and points to each man as he is to ring. The "Change Sequence" is one of 1500 changes possible on eight bells, and since we have a full octave and a half from C to G', we
are able to ring this change in several keys to stress the lesson that "to solve any problem one must make some changes." The relation of the therapist as conductor to the group offers many opportunities for a mutual sharing of the activity. Occasionally, for example, the leader would make a mistake by pointing to the wrong person to ring, and this proved a helpful event since he always admitted making the error and being vulnerable.

3. Ringing a series of tunes. Usually six or seven numbers are rehearsed. They include folk tunes, love songs, hymns, patriotic songs, Stephen Foster songs, and sometimes just improvising. Some are done rapidly, some slowly. In either case, alertness and precision are encouraged, and taking account of one another. When an especially successful ringing has taken place, the leader gives the signal for all to ring simultaneously, "Once! Twice! and Thrice!"

4. Problem-solving unit. Usually, a special problem is designed to be introduced at this time aimed at encouraging adoption of alternatives and transfer of learning. Often this part proves useful in inducing the patient to use abstractions, definitions, principles, rules, etc., or to integrate his knowledge and skills on a new level. If one patient is behaving maladjustively, spoiling the group result, the ringing is stopped, and the patients themselves are asked to deal with the "problem"; e.g., two men who quarreled paid little heed to the therapist's interference, but when he asked the group what to do about it, they both responded to the group pressure and agreed to cooperate. Sometimes, musical problems are presented involving discrimination of gross differences. On occasion the leader has given the members a chance to take his place in the center.

5. Invitation period. Toward the end of each session, each member is permitted to "invite" another man by name to "do him the favor" of ringing his bell for him. At the beginning, none of the B Group could do this, but today this is not the case.

6. Termination of session. As each man leaves, having placed his bell on his chair, the therapist tries to address each one personally with some word such as "Goodbye," or "I'll see you next Friday (or Wednesday)," or "Thank you for coming."

Special events have occurred from time to time for each group. A Kiwanis Club acted as host to the A Group on one occasion, providing dinner and an opportunity to ring their numbers as the
program of the day. A nearby church presented the B Group in an evening program and topped it off with refreshments served in the church dining room. These public events called forth unexpected evidences of etiquette and personal expressions of thoughtfulness in the patients. On both these occasions, these men were nicely dressed, and even our most compulsive patient sat quietly both through the public performance and at the dinner table.

Another value of the operation stems from making the group responsible for the pathologic behavior of its members whenever it interferes or threatens the group product. If one man is hallucinating, chasing ghosts, or compulsively leaving his chair and walking across the room, this behavior is brought openly to the attention of the other members of the group, and they are asked, “What can we do to help Mr. X solve his problem so that it will not spoil our performance?” The result of this policy shows in improved morale, more productive interaction, and a better cohesiveness.

The “Invitation Period” discloses many of the sociometric identifications of the members. Having to choose someone to do one a favor is hardly the forte of schizophrenics. Communication lines have been opened up, and patterns of interaction have developed where they were previously non-existent. Our patients have learned to expect to realize some, if not all, of the following values in this activity:

1. Approval from fellow-patients.
2. The privilege of occupying a recognized position in a well-ordered, goal-directed group—with a sense of belonging to it.
3. Association with an understanding, trained music therapist.
4. Participation in the joint results of group music-making.
5. Satisfaction from becoming able to contribute to the group goals.
6. Identification with an activity whose chief end is to create and control the beautiful in tone.
7. Occasional discoveries of new ways to handle personal and social problems.
8. A chance to express unvoiceable emotions through non-verbal inflection of music.
9. Opportunities to share this self-expression with others.
10. An unfolding understanding that the fundamental usefulness
of belonging to this Music Therapy group is, in a non-threatening workshop, to explore changes in attitudes, varied skills in social interaction, different levels of aspiration, freer spontaneity, and more enduring interpersonal relationships.

11. Success in the substitution of realistic, honest behaviors for unreal avoidant behaviors.

These are the positive reinforcements which the members of both of these groups expect to receive by engaging in this form of musical behavior in this Music Therapy situation.

VALIDATING HANDBELL RINGING AS A MUSIC THERAPY OPERATION

It should be one of our primary aims, as music therapists, to determine the validity of our practices. We need to be concerned with the extent to which a given operation attains the goals it purports to achieve. Form 002–08,² presented here, (see Figure 1) offers some criteria, or “dimensions” for measurement of operative effectiveness, which we believe lie close to the interest of music therapists when they adopt the role of “change agents.”³ These criteria were chosen after much experimentation with the use of different categories and the setting of various therapeutic goals, but they were not original, having been adopted from many sources.⁴ ⁵ ⁶ ⁷ ⁸ ⁹ ¹⁰ We have found this semi-objective system very helpful in understanding the validity of our group operations, and it has been used with many of our small group activities besides the Bell Ringers Clubs. The replica of this Form given here is the actual report of a Bell Ringing operation.

### VALIDITY QUOTIENT for Music Therapy Operations

<table>
<thead>
<tr>
<th>Observer Hospital</th>
<th>Bell Ringing 136-4 Bells</th>
<th>Date</th>
<th>Report No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fultz 501-05</td>
<td>002-08</td>
<td>7/25/1962</td>
<td>12</td>
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</tbody>
</table>

**Scale:**
- 0: None
- 1: Some
- 2: Much

1. Record the value of OBSERVED RESPONSES ONLY for each group member in this situation.
2. Add an "O" in each column (with the exception of columns la, b, c) in every case where there were NO OBSERVED RESPONSES.

**Code:**
- I INTERFERENCE with a) Avoidant; b) Inadequate; and/or c) Maladaptive behaviors.
- II ALTERNATIVE ways of solving problems (musical or otherwise) induced by this operation.
- III TRANSFER OF LEARNING from one part of this situation to another induced by this operation.
- IV GROWTH produced in terms of the following dimensions:
  - a) Gross differentiation
  - b) Integrating knowledge or skills
  - c) Manifesting greater precision
  - d) Using abstractions, rules, principles, etc.
  - e) Acting with greater spontaneity (freedom from environmental domination)

<table>
<thead>
<tr>
<th>Patient No.</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V Other</th>
<th>Achieved Units</th>
<th>Potential Units</th>
<th>Patient Ratio (A/B)</th>
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<tr>
<td>1</td>
<td>064</td>
<td>3 a</td>
<td>2 b</td>
<td>3 c</td>
<td>4 d</td>
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**Totals:** 48/90 32 35 49 31 39 23 35

Op. Ratio: .53 .44 .49 .68 .43 .64 .52 .49

Validity = .49

**Figure 1:** Form 002-08, Validity Quotient for Music Therapy Operations

as it occurred on July 25, 1962. If carefully examined, it should require very little explanation. With a little training a more or less uniform use of this instrument has become possible in the hands of several observers.

The present study attempts to correlate data obtained in the systematic observation of two Bell Ringing situations in Hospitals A and B. The ratios computed at the bottom and in the extreme right hand column (See Figure 1, Form 002-08), refer to
parameters\textsuperscript{11} related to a given set of therapeutic goals, and these ratios constitute the data for this study. The percentage of potential units achieved (A/P) is used to express the degree to which our music therapy operation was effective on each occasion. Twelve situations in Hospital A comprise twelve samples in which the ratios were computed from observation of the eight dimensions, plus the "VQ," or percentage of total potential achievement over-all.

It is assumed that the situation created by the Bell Ringing operation affects the degree to which each of these measures may appear and the extent to which they can function in the change process\textsuperscript{12}. If we examine these values derived from this sequence of group situations, should we not be able to predict or generalize about the effectiveness of this operation when employed in a similar sequence of situations? What confidence could be placed in such predictions? How could this hypothesis be tested?

The first problem to which we should turn is the problem of knowing the probability of obtaining in a given sample a function of different values of the parameters of the population. In a given sample—ours, for instance—with what confidence can it be said that the population from which it was drawn possessed a specific parameter within a given range?\textsuperscript{13} From what kind of population, or universe, of group situations created by this music therapy operation was this special sample set of group situations drawn? With what confidence can we expect the "dimensions" measured in the sample to be representative of the parameters of the population?

The basic information we seek, then, by this study, is not just the validation of our procedures, nor even the methods used in quantifying our observations. It is rather to learn whether the kind of data obtained by this system as applied to a given set of situations, is purely clinical or idiographic—applicable solely to the


Winer suggests, "In order to distinguish between quantities computed from observed data and quantities which characterize the population, the term \textit{statistic} will be used to designate a quantity computed from sample data, and the term \textit{parameter} will be used to designate a quantity characteristic of a population." Page 4.

\textsuperscript{12} Lippitt, et al., \textit{op. cit.}

\textsuperscript{13} Winer, \textit{op. cit.}
given sequence of situations—or whether, when applied to otherell ringing activities over a similar sequence, the attainment ob-
served will differ significantly in any of these dimensions. If a
group of patients is treated by a given music therapy operation,
will the situations over a period of time produce units of achieve-
ment along specific dimensions which can be regarded as repre-
sentative of an infinite number of groups so treated?

TREATMENT OF DATA

One of the difficulties in this kind of problem is the fact that
the parameters of the population are not known. The next best
ting to do in such a state of ignorance is to assign population
status on the basis of some sort of unbiased estimate of these
values. The data obtained by observation of the operation in
Hospital A was derived from twelve samplings of this group
situation. The nine mean scores computed from observed data
will have to serve as our best unbiased estimates. Thus, these
nine means (X̄), and their standard errors (s), will be used as the
best unbiased estimate of the universal mean (µ), and the popu-
lation standard deviation (σ).

By drawing another sequence of twelve samples using the
same operation in a different hospital (B), and noting the dif-erence in its X̄ and s values from those of the estimated para-
eters of the population, we can test the assumption that, when
repeated, using this music therapy operation will not produce
achievement scores significantly different from those we are us-
ing as our best unbiased estimates of means and standard devi-
ations of the universe. This is to say that, with a certain amount
of risk, we would predict that the average score developed in
another situation along the dimensions specified will equal the
average score obtained in the situations created by this operation
in Hospital A; at least any deviation from these mean scores will
be too small to be significant. By using Student's t as the measure
of significance of difference, we can know within a determined
probability how reliable our predictions will be. The statistical
statement is,

\[ P(t_{obs} > t_{0.99} \mid H_1 \text{ is true}) = 0.01. \]

In order to reject \( H_1: P(t_{obs} > 2.72 \mid H_1 \text{ is true}) = 0.01. \)

When the nine pairs of means were tested in this way, all of
the calculations show that the probability of any sample of similar
<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>HOSPITAL</th>
<th>MEAN %</th>
<th>$s$</th>
<th>$t_{obs}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Interference</td>
<td>A</td>
<td>50.75</td>
<td>11.88</td>
<td>0.9488</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>49.33</td>
<td>5.47</td>
<td></td>
</tr>
<tr>
<td>II. Alternatives</td>
<td>A</td>
<td>40.83</td>
<td>8.68</td>
<td>0.4010</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>39.67</td>
<td>10.008</td>
<td></td>
</tr>
<tr>
<td>III. Transfer</td>
<td>A</td>
<td>37.75</td>
<td>11.37</td>
<td>1.1945</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>33.08</td>
<td>10.63</td>
<td></td>
</tr>
<tr>
<td>IV. Growth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Differentiation</td>
<td>A</td>
<td>58.50</td>
<td>10.41</td>
<td>1.3479</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>50.00</td>
<td>21.82</td>
<td></td>
</tr>
<tr>
<td>b. Integration</td>
<td>A</td>
<td>38.42</td>
<td>14.66</td>
<td>1.4613</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>41.33</td>
<td>6.89</td>
<td></td>
</tr>
<tr>
<td>c. Precision</td>
<td>A</td>
<td>51.92</td>
<td>12.85</td>
<td>2.1046</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>44.42</td>
<td>12.33</td>
<td></td>
</tr>
<tr>
<td>d. Abstracting</td>
<td>A</td>
<td>20.25</td>
<td>11.77</td>
<td>0.1021</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>19.92</td>
<td>11.18</td>
<td></td>
</tr>
<tr>
<td>e. Spontaneity</td>
<td>A</td>
<td>33.17</td>
<td>9.21</td>
<td>0.6055</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>34.92</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>Validity Quotient (Over-all)</td>
<td>A</td>
<td>41.67</td>
<td>8.70</td>
<td>0.9482</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>39.42</td>
<td>8.21</td>
<td></td>
</tr>
</tbody>
</table>

situations producing a mean whose $t$ would be greater than 2.72 (2.72 is the critical $t_{.99}$ for eleven degrees of freedom listed in the Table of Student's $t$, which is a one-tailed test) when our $H_1$ is true, is .01. (See Table 1.) At this level of confidence we note that all of the dimensions studied actually support our hypothesis that the means found in the samples are equal to those existing in the universe.

**DISCUSSION**

*Some Pertinent Issues*

A number of issues have emerged from attempting to make this study. Perhaps the recognition of these issues through this effort may prove to be one of its most useful results. A great deal of effort has gone into trying to meet the demands of statistical inference. We should be gratified to find that the difference of the
Research means studied above in detail turned out so positively in support of our major hypothesis. But this is somewhat dimmed by the smallness of our sample, and this, for one thing, might make the inference suspect.

The question arises as to just why differences in percentages of achieved units—reflecting the behavior of our groups—repeat themselves with no significant differences in all of the measures used. Could it be because the groups are comparable? Both groups are made up of chronic schizophrenic men who have been hospitalized for a long time. Both receive about the same amount (in this case, comparably generous) of attention and interest from ward personnel. Some ways however, in which our situational treatment in Music Therapy differs for the two groups was described earlier, but this did not affect the results.

Could it be that handbell ringing only permits a limited repertoire of behaviors by participants? Both groups have used the same songs and followed the same format throughout. The same procedures were used in each group.

Are we not overlooking a major influence in each of the situations, the leader-therapist? The same person conducted all the sessions. But would this fact not have reflected the moods and varying feelings of acceptance and rejection characteristic of human leadership, especially apt to be inconsistent over such an extended period of so many meetings? This, it would seem, would tend to create important differences in the effectiveness of the operation, and subsequently in the grading of the dimensions. But it did not.

Finally, might it be that the therapist’s ranking of achievement units followed a characteristic pattern for the two groups and would necessarily tend in both instances toward positive results? To check this possibility, two other persons were asked to rank several of the situations independently of each other and of the therapist. Their achievement percentages corresponded with his very closely. (We realize that this is not an ideal check, but it was the only one practicable at the time.) Another device was also developed to reduce the observer-involvement in the data. Fairly minimal rules were set down by which the awarding of achievement units were to be assigned.

Allport treats this problem comprehensively in his discussion
of the meaning and criteria of objectivity.\textsuperscript{14} He considers "objectivity to be this effort to reduce to a minimum the influence of the observer's own activity upon the description of what is observed."\textsuperscript{15} The objectivity of the therapist in producing data about the Bell Ringers' meetings, can be thought of as a matter of degree. It is always the hope of experimenters to attain maximum objectivity. However, in the kind of description involved in this study, it is well to remember that the subjectivity of the therapist is also an objective fact of the situation being described. It would obviously be foolish to try to describe the bell ringing operation as something "out there" minus the conductor. It is meaningless to ask how events are, or would be, \textit{per se}. What is implied in a report of data observation such as this study, is (1) that special devices and methods were employed by the therapist-observer to minimize any influence he might exert as an observer upon their description; (2) that the operational procedures are open to the public to test, to replicate the study; and (3) that the data encountered by the observer originated in the sources which control and limit the factors thus described. Under these circumstances, "we have the most satisfactory assurance that what is being studied is probably independent of the observer and his methods, and that its description will be as objective and free from observer-influence as possible."\textsuperscript{16}

\textbf{Extra-Study Corollaries}

There are several issues which this particular report cannot handle which are commended for further investigation. One of these is the problem of why some of the dimensions measured receive a consistently higher percentage of achieved units than others. For example, observed interference with avoidant, inadequate, and/or maladjustive behavior accumulated more than twice as great a percentage of achieved units as did the use by patients of abstraction, definitions, rules, principles, etc. One might examine the highest percentages in comparison with the lowest.\textsuperscript{17} Thus, IVa (differentiation) heads the list of high percentages, with I (interference), and IVc (precision) running a close second; while IVd (abstracting) acquired the lowest per-


\textsuperscript{15} \textit{Idem}, 18.

\textsuperscript{16} \textit{Idem}, 19.

\textsuperscript{17} CF, Table 1, p. 178.
Another problem is related to the progressive increase in ranks as the fourth quarter of the periods approaches. Studied longitudinally, and using the mean scores for each series of three meetings, we note in the two hospitals the following rise in situational achievement through the four quarters of the twelve sessions:

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>VQ (OVER-ALL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hosp. A</td>
<td>40.0</td>
<td>35.3</td>
<td>40.0</td>
<td>51.3</td>
<td>41.67</td>
</tr>
<tr>
<td>Hosp. B</td>
<td>29.7</td>
<td>37.3</td>
<td>42.7</td>
<td>48.0</td>
<td>39.42</td>
</tr>
</tbody>
</table>

What lies behind these changes in VQ averages? Why was the fourth quarter the best in both hospitals? What caused the increasing improvement during the last three periods in both hospitals? Could these progressive changes be expected in other situations? At what level of confidence?

A still further question seems most important, namely, why was it not possible to achieve more than approximately 40 per cent of the possible units of achievement in this activity over the twelve meetings held? Is this good? Does this support our premise that behavior influences music? That is, can schizophrenic men go further in sixteen weeks of time? Perhaps a better question might be, can they go this far, really?

One other query presents itself: How does the observable behavior within the situation in Music Therapy Bell Ringing operations compare with that outside?

**Summary**

In a study of Handbell Ringing as a Music Therapy operation in two hospitals, a brief history of handbell ringing was followed by a description of how this musical activity was directed in the two hospitals toward Music Therapy goals. This section also described values and advantages noted in employing this operation with chronic schizophrenic male patients, listing some of the positive reinforcements expected by them through participating in this activity.

The notion of operational validity was related to eight dimensions along which measurements could be made, and percentages
of achieved units were indicated as the data for this study. The central problem investigated here was to learn the probability that the data obtained by the sample was representative of the universe if an infinite number of replications were to be made.

A t test of differences in the means between Hospital A, taken as the best estimate of parameters of the universe, and those of Hospital B, proved that at the 1 percent level of confidence, all of the dimensions studied actually did support the hypothesis that our sample means are equal to those of the universe. Generated by this fact, many other hypotheses appeared which are suggested for further studies.
The purpose of this paper is to describe a program of research that is being carried out on the general problem of the physiological effects of music. To provide as complete a picture as possible of the research program, I will discuss first the beginnings of the program, including the assumptions underlying the research and the first actual study—which was completely negative. Then, we will look at the next three studies that were done. Finally, I would like to say a few words about what is being done now and what is planned for the future.

When we first became interested three years ago in the broad problem of the psychological effects of music, we conducted a survey of research and writings on the topic. As a result of this survey, we decided to concentrate our attention on the so-called mood effects or emotional effects of music. A check of the scientific studies on this more specific problem of emotional effects revealed that relatively few such studies had been done, that many of them were quite old and of questionable scientific validity, and that in most of the studies the emotional effects of the music were measured using subjective techniques such as rating scales and questionnaires.

We made a major decision at this point and have abided by that decision throughout all of our research. We decided that in all of our studies we would measure the emotional or mood effects of the music by objective techniques rather than the more subjective techniques that were commonly used. We selected physiological responses for this purpose. As is commonly known, the psychological experience of an emotion is accompanied by various physiological changes. Think, for example, of the last time you almost got hit by a car while crossing the street. When you finally got to the opposite curb, your heart was pounding, your palms felt sweaty, you were breathing rapidly, etc. A well-known practical application of the knowledge that physiological processes accompany emotion is lie detection. The lie detector is simply a device for measuring various physiological processes such as heart rate, respiration, and GSR—which stands for galvanic skin response and is a change in the electrical resistance of the skin due to change in perspiration. The theory behind lie
detection is that telling a lie is emotionally upsetting and that the emotional upset is accompanied by physiological changes which are then picked up by the lie detector. In our music research, then, the use of physiological measures was a means of determining the emotional responses to the music.

Our next step was to find music which presumably had emotional or mood effects. For this purpose, we obtained six pieces of music from the list prepared by Capurso.1 He had over one hundred pieces of music evaluated by students for mood effects. The pieces we selected and their intended mood effects were: Liszt—Mefisto Waltz, "stimulating"; Berlioz—Symphony Fantastique, "irritating"; Ravel—Pavan, "soothing"; Bach—Jesu, "prayerful"; Tchaikovsky—Romeo and Juliet Overture, "depressing"; Stravinsky—Firebird Suite, "weird." We listened to each piece and selected that five-minute portion which we judged to be most likely to produce the desired mood effect. Each five minute piece was then played to 133 students who rated each piece for mood effect. The results of these ratings by the college students confirmed our judgment about the mood effects of each piece.

At this point, the study proper began. We played each piece in properly balanced order to 36 college students and obtained a measure of heart rate and GSR for each piece. Statistical analysis of the results revealed no difference between any of the six pieces of music as far as heart rate or GSR were concerned. Our interpretation of this completely negative finding is that while people are able to perceive and judge a piece of music as having a certain mood effect, that does not necessarily mean that they will actually feel that way when the music is played to them. We also believed that the pieces of music were not powerful enough to elicit a mood effect that was sufficiently strong to produce changes in physiological response. We further believed that the moods supposedly being produced were too finely divided, that is, were not sufficiently distinct from each other.

Having run into this blind alley in our first study, we realized that we must start out on a new approach to the problem. We decided that what we needed were powerful pieces of music that aroused more basic mood or emotional responses. So we took the most fundamental dimension of emotion; namely, exciting-calm-

If stimulus has an emotional effect, then it will either excite the emotions or calm them.

It was then necessary to find pieces of music that were believed to be emotionally exciting, emotionally calming, and emotionally neutral. In addition, the pieces were not to be too familiar, were not to be popular pieces, and were to be available on records played by a full orchestra. With this in mind, we approached several individuals in Milwaukee who knew music much better than we did. Following their advice, we obtained the necessary records, selected those portions of the records that seemed to us most exciting, most calming, and most neutral, and then played those portions to one hundred and fifty students so as to get their evaluation of the exciting, neutral, and calming aspects of the pieces. The results of the student ratings, quite fortunately, did confirm the exciting, neutral, and calming nature of the pieces we had selected. The pieces were: Final Movement of the New World Symphony, "exciting"; Les Sylphides, "neutral"; and Air for the G String, "calming."

We took only certain portions of each total musical selection. Each of these portions was about three minutes in length and are the ones used in all of our studies thus far.

In an effort to describe as briefly as possible the three studies that we have done on exciting, neutral, and calming music, I will simply present the summary portion of the report of each study. The complete report of each is scheduled for publication.

The first study dealt with the effects of music upon GSR and heart. The summary follows. "The hypothesis being tested was that the responses to three pieces of music designated as exciting, neutral, and calming exist in that order on a scale of GSR and of heart rate. A selected six-minute portion of a piece by Dvorak, by Chopin, and by Bach that were judged by college students to be exciting, neutral, and calming, respectively, were played in counterbalanced order to each of 18 randomly selected college students. Measures of GSR and heart rate were taken at intervals of 15 seconds. The hypothesis tested was partially confirmed with respect to GSR but not heart rate. The GSR response to the exciting music was a pronounced decrease in resistance (indicating increased emotional arousal) while the response to both

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the neutral and calming music remained unchanged throughout the playing of the music."

The second study was concerned with the effects of exciting and calming music upon GSR of two groups of psychotics. The summary follows. "Two experiments, one using depressive and the other using schizophrenic patients, were conducted to test the hypothesis that calming music produces an increase and exciting music a decrease in electrical resistance of the skin (GSR). In both experiments, a musical piece judged by college students to be exciting and another piece judged to be calming were played for six minutes in counterbalanced order to 18 randomly selected depressives and to 18 randomly selected schizophrenic patients. Measures of GSR were obtained for each one of the six minutes during which the music was played. The hypothesis was confirmed in each experiment.

"It was found for both the depressives and the schizophrenics that the decrease in electrical resistance due to the exciting music was of greater magnitude and shorter latency than the increase in resistance due to the calming music. Comparison of the results for the two pieces of music within each experiment demonstrated a difference in the level of electrical resistance due to the music and in the consistency of the level of resistance. The response to the exciting music was less consistent than the response to the calming music. The changes in electrical resistance are interpreted as due to emotional effects produced by the music. The possibility is thus presented that music can be used to modify temporarily the general emotional level of depressive and schizophrenic patients."

The third study in this series extended the investigation to three groups of children. The summary follows. "This experiment was conducted to determine the effects of music upon GSR of children. An excerpt of a musical selection judged by college students to be exciting and one judged to be calming were played in counterbalanced order to a group of kindergarten, third grade, and sixth grade children while continuous measures of GSR were taken. It was hypothesized on the basis of earlier studies employing college students and psychotics that the two kinds of music

produce differential effects upon GSR, with the exciting music producing a decrease and the calming music an increase in electrical skin resistance. On the assumption that GSR is a physiological indicator of emotional response, a decrease in resistance is indicative of an increase in emotional excitement and an increase in resistance is indicative of a decrease in emotional excitement.

The hypothesis was confirmed, thus further extending the generalizability of the effects of these musical stimuli. In comparing the results for the children with those for the college students and the psychotics, the children are more responsive to the music. The children manifest a shorter latency and a greater magnitude but not shorter latency of response to the calming music than do the two older, but more specialized, groups of subjects. No differences in response to either kind of music were found among the three age groups used in the study. A question was raised as to the responsiveness of six-month old infants to the exciting and calming music, and the suggestion was made that children be used as subjects in future studies of the physiological effects of music.

As a final point, let me very briefly describe our plans for the immediate future. Recently, through the cooperation of the School of Engineering at Marquette University, we were able to obtain for each piece of music a graphic record on special tape of the total sound pressure over the entire frequency range. We are thus able to compare the sound pressure, let us call it the intensity, of the exciting, neutral, and calming pieces of music. Visual inspection of these intensity records indicates that, in general, there is no difference among the three pieces in average intensity level. This is a very significant point because an objection that has been raised to our research is that the differences in GSR are due only to the differences in intensity of the musical pieces. While this objection does not appear to be valid, we are going to conduct, as our next study, a study on the effects of varying the intensity. So we will produce exciting music of high and low intensity and then calming music of high and low intensity. GSR will be obtained for each of the four pieces. Comparison of these results should provide us with a good indication of the role of intensity in the exciting and calming nature of these pieces of music.
This last point about intensity and the role it plays in exciting and calming music is a specific example of the general problem we are currently attacking in our research. The problem is: what is it in the music that is producing the emotional response as measured by GSR? Intensity, melody, tempo, and pitch are possible answers to this question. The complexity of music and the difficulties in measuring and varying these factors makes the job of answering this question quite difficult.

In conclusion now, let me comment a little about the relationship between this research and music therapy. If, through this scientific research, we are able to determine what it is in music that produces various kinds and degrees of emotional response, then the possibility is presented of the music therapist being able to select that music which will have the desired emotional effect on the patient. Knowing more about the music and its effects on emotion should enable the music therapist to use music more effectively.

I might also mention, and this is pure speculation at this moment, that if we do discover what factors in music produce what emotional effects, then it might be possible to compose or make music that will do certain things to a person. Thus, the music therapist might write out a prescription for music that is to do a certain job. The prescription might then be filled by a computing machine. In this connection, I am to meet with a mathematician who works with the IBM 650 electronic computer at Marquette University. He is interested in composing music with the computer. I don't know what will come of this meeting, of course, but it promises to be most interesting from the point of view of music, psychology, and music therapy.
APPENDIX
OFFICERS OF THE
NATIONAL ASSOCIATION FOR MUSIC THERAPY 1960-61

ELECTED OFFICERS

President:
Robert F. Unkefer, Assistant Professor, Department of Music and Department of Psychology, Michigan State University, East Lansing, Michigan.

Immediate Past President:
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President-Elect:
Erwin H. Schneider, Ph.D., Professor of Music Education, School of Music, The Ohio State University, Columbus, Ohio; Past-President, Southeastern Regional Chapter, NAMT.

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Second Vice President and Membership Chairman:
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Treasurer:
Walter Lancaster, Director, Department of Music Therapy, Evansville State Hospital, Evansville, Indiana.

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Editor:
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William W. Sears, Ph.D., Lecturer in Music Therapy, Department of Music, Ohio University, Athens, Ohio.

Archivist:
Carol I. Collins, Music Therapist and Supervisor of Clinical Affiliates, Kalamazoo State Hospital, Kalamazoo, Michigan.
Parliamentarian:
Ray Glover, Director of Psychiatric Music Therapy, Larned State Hospital, Larned, Kansas.

Central Office Coordinator:
Ruth Boxberger, Department of Music Education, The University of Kansas, Lawrence, Kansas.

Publisher:
Harold Allen, The Allen Press, Lawrence, Kansas.

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Hon. Carroll D. Kearns, Mus.D., Member, United States Congress, from Pennsylvania; Formerly concert artist; Soloist, the Chicago Symphony Orchestra; Superintendent of Schools, Farrell, Pa.; Head, Department of Music, State Teachers College, Slippery Rock, Pa.; and Guest Conductor, United States Air Force Symphony Orchestra and Band.

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Karl Menninger, M.D., Chief of Staff, The Menninger Foundation, Topeka, Kansas.
QUALIFICATIONS FOR MEMBERSHIP

**Active membership** is open to all persons engaged in the use of music in therapy including music specialists, therapists, physicians, psychologists, administrators, and educators, and provides the right to vote, participate and hold office in the Association. Annual dues $14.00.

**Associate membership** is open to music volunteers or individuals who are not professionally engaged in the use of music in therapy but who wish to support the program of the Association. This membership does not include the right to vote or hold office. Annual dues $3.00.

**Student membership** is open to students enrolled in music therapy training courses at the college level. This membership does not include the right to vote or hold office. Annual dues $2.00.

**Contributing membership** is open to individuals who contribute $25.00 annually to the support of the Association, and shall carry privileges at whatever membership level the individual qualifies.

**Sustaining membership** is open to individuals, organizations, institutions, or business firms which contribute $50.00 annually to the support of the Association. This may include an individual membership assigned to a person designated by the donor. This person will be entitled to privileges at whatever membership level he qualifies.

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**Patron membership** is open to individuals, organizations, institutions, business firms, or Foundations contributing $500.00 or more. These funds may be used for scholarships, endowments, research, or special projects as designated by the donor with the approval of the Executive Committee. Patron membership may include an individual membership assigned to a person designated by the donor who will be entitled to privileges at whatever membership level he qualifies for one year.

**Honorary life membership** may be conferred by the Association upon any person in recognition of distinguished service in the field of music therapy without further payment of annual dues and provides privileges at level where recipient qualifies.
Music Club Affiliate Membership shall be open to all music clubs supporting the objectives and purposes of NAMT and contributing $15.00 or more annually to the Association. Rights and privileges shall be the same as those for Associate Membership when the membership is listed in the name of an individual club member.
The book of proceedings of the Second Annual Conference of NAMT, held in Chicago, November 9–11, 1951, is available from The Allen Press, P.O. Box 4, Lawrence, Kansas, for $3.68 postpaid U.S.A.

**Preface**—The Development of Music Therapy as a Profession

**Part I**—Music to Aid the Handicapped Child

**Part II**—Demonstrations

**Part III**—Scope of the Hospital Music Program and Professional Opportunities

**Part IV**—Volunteer Music Service in Hospitals

**Part V**—Musical Creativity and Emotional Conflict

**Part VI**—Patient Benefits of Community Concerts

**Part VII**—Report of Research Committee

**Part VIII**—Bibliography on Music Therapy

(600 Classified Items)

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**Part I**—Psychiatric Viewpoints on Music Therapy

**Part II**—Music in Mental Hospitals

**Part III**—Music Therapy for Tuberculous Patients

**Part IV**—Music in Correctional Institutions

**Part V**—Music for the Mentally Retarded

**Part VI**—Music for the Physically Handicapped

**Part VII**—Music for the Emotionally Maladjusted Child

**Part VIII**—Volunteer Services

**Part IX**—Research
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Music Therapy 1961

MUSIC THERAPY 1953

The book of proceedings of the Fourth Annual Conference of NAMT, held in East Lansing, Michigan, October 19–21, 1953, is available from The Allen Press, P.O. Box 4, Lawrence, Kansas, for $5.20 postpaid U.S.A.

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PART II—Applied Techniques of Music Therapy
PART III—Music Therapy with Children
PART IV—Music in Geriatrics
PART V—Music Therapy for Tuberculosis Patients
PART VI—Music in the Religious Program
PART VII—Music in Surgery
PART VIII—Volunteer Service
PART IX—The Music Therapy Education Program
PART X—Research

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PART II—Dynamics of Music Therapy
PART III—Music Therapy for Specific Syndromes
PART IV—Music Therapy for Exceptional Children
PART V—Volunteer Services in Music Therapy
PART VI—Ancillary Therapies and Their Relation to Music Therapy
PART VII—Progress in Music Therapy in Veterans Administration Hospitals
PART VIII—The Music Therapy Education Program
PART IX—Research in Music Therapy

MUSIC THERAPY 1955

The book of proceedings of the Sixth Annual Conference of NAMT, held in Detroit, Michigan, October 6–8, 1955, is available from The Allen Press, P.O. Box 4, Lawrence, Kansas, for $5.20 postpaid U.S.A.
Appendix

PART I—Correlates of Music Therapy
PART II—Music Therapy for Exceptional Children
PART III—“Music in Action” at Wayne County General Hospital, Eloise, Michigan
PART IV—Reports of Six Regional Presidents
PART V—Music Therapy in Veterans Administration Hospitals
PART VI—Reports of Literature
PART VII—Research in Music Therapy
PART VIII—Survey: Uses of Music in Institutions
PART IX—Summary

MUSIC THERAPY 1956

The book of proceedings of the Seventh Annual Conference of NAMT, held in Topeka, Kansas, October 18–20, 1956, is available from The Allen Press, P.O. Box 4, Lawrence, Kansas, for $5.20 postpaid U.S.A.

Part I—The Dynamics of Music Therapy
Part II—Professional Growth of Music Therapy
Part III—Music Therapy in the Adult Psychiatric Hospital
Part IV—Music Therapy for Exceptional Children
Part V—Music Therapy for the Blind
Part VI—Music Therapy Equipment
Part VII—The Music Therapy Education Program
Part VIII—Research in Music Therapy
Part IX—Summary
Part X—Index of Preceding Volumes of this Series

MUSIC THERAPY 1957

The book of proceedings of the Eighth Annual Conference of NAMT, held in East Lansing, Michigan, October 10–12, 1957, is available from The Allen Press, P.O. Box 4, Lawrence, Kansas, for $5.20 postpaid U.S.A.

PART I—The Dynamics of Music Therapy
PART II—Music Therapy in the Psychiatric Hospital
PART III—Music Therapy for Exceptional Children
PART IV—Music Therapy, Music Education, Special Education
PART V—Dance Therapy
PART VI—Research in Music Therapy
PART VII—“Question Box Session”
PART VIII—Association Growth

MUSIC THERAPY 1958

The book of proceedings of the Ninth Annual Conference of NAMT, held in Cincinnati, Ohio, October 30 to November 1, 1958, is available from The Allen Press, P.O. Box 4, Lawrence, Kansas, for $5.20 postpaid U.S.A.

PART I—The View of Hospital Administrators
PART II—The Hospital Show as a Therapeutic Instrument
PART III—Group Psychotherapy
PART IV—Music in Physical Medicine
PART V—Music Therapy and Special Education
PART VI—Music Therapy for Exceptional Children
PART VII—Dance Therapy
PART VIII—Volunteer Services in Music Therapy
PART IX—Reports of Special Interest Groups
PART X—Research in Music Therapy
PART XI—Association Growth
PART XII—Music Therapy Bibliography

MUSIC THERAPY 1959

The book of proceedings of the Tenth Annual Conference of NAMT, held in East Lansing, Michigan, October 9–11, 1959, is available from The Allen Press, Box 4, Lawrence, Kansas, for $5.20 postpaid U.S.A.

Part I—Music in Mental Hospitals
Part II—Volunteer Services in Music Therapy
Part III—Music Therapy for Exceptional Children
Part IV—Music Therapy and Music Education
Part V—Music Therapy in Geriatrics
Part VI—Conference Reports
Part VII—Research in Music Therapy
Part VIII—Association Growth
MUSIC THERAPY 1960

The book of proceedings of the Eleventh Annual Conference of NAMT, held in San Francisco, California, October, 1960, is available from the Allen Press, Box 4, Lawrence, Kansas, for $5.20 postpaid U.S.A.

Part I—Current Viewpoints in Music Therapy
Part II—The Education and Function of the Music Therapist
Part III—Music Therapy in Psychiatric Hospitals
Part IV—Music Therapy as Individual Therapy
Part V—Music Therapy for Exceptional Children
Part VI—Research in Music Therapy
Part VII—Association Growth
Part VIII—Addendum: Music Therapy Bibliography
Part IX—Index of Preceding Volumes

BULLETIN OF THE NATIONAL ASSOCIATION FOR MUSIC THERAPY, INC.

The official bulletin of the Association, formerly known as Hospital Music Newsletter, is issued in January, May and September at 50 cents per copy, or $1.50 for a yearly subscription. All members in good standing are entitled to receive the bulletin free of charge. Selected back issues are available at the single copy price. All subscriptions and orders for back copies should be addressed to National Association for Music Therapy, Inc., P.O. Box 15, Lawrence, Kansas.

PAMPHLET—MUSIC THERAPY AS A CAREER

Prepared by the Education Committee of NAMT, this pamphlet gives opportunities for employment and outlines personal and educational qualifications. It is available from the chairman of this committee, National Association for Music Therapy, P.O. Box 15, Lawrence, Kansas.

PAMPHLET—THE WHAT AND WHY OF MUSIC THERAPY

Prepared by the Public Relations Committee of NAMT, this pamphlet contains a general description of the field of music
therapy for the lay reader. Historical information is included. It is available from the chairman of this committee, National Association for Music Therapy, P.O. Box 15, Lawrence, Kansas.
REGISTRATION OF MUSIC THERAPISTS
(Adopted 1957)

WHO SHALL BE ELIGIBLE

For the present, and for the next year, all persons actively and for the most part engaged in music therapy shall be eligible. In addition, educators who have directly to do with music therapy either administratively, pedagogically, or clinically shall be eligible.

EXPERIENTIAL AND TRAINING DETERMINANTS

Persons not holding a college degree but who have been engaged satisfactorily in music therapy positions on salary for a period of at least three years previous to December 31, 1960, shall be eligible for registration.

Persons who hold a college degree whose major study was not in music therapy, but who have been engaged satisfactorily in a music therapy position on salary for a period of at least one year previous to December 31, 1960, shall be eligible for registration.

Persons who have completed a degree course in music therapy from an institution “tentatively approved” or “fully approved” by NAMT previous to December 31, 1960, shall immediately upon graduation be eligible for registration.

ELIGIBILITY AFTER DECEMBER 31, 1960

After December 31, 1960, no one shall be eligible for registration unless he has completed a four-year degree course in music therapy from an institution “fully approved” by NAMT.1

A person graduating from a “tentatively approved” institution after this date may become eligible only after the Certification Committee of NAMT shall have examined and found satisfactory the transcript of his academic and clinical training.

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1. The equivalent of such a four-year course, substantiated by transcripts of academic and clinical training, when such has been obtained through a combination of another bachelor’s degree in music with additional work, will also suffice.
MACHINERY AND REQUIREMENTS FOR REGISTRATION

The applicant must present evidence of the following types:

(1) For music therapists without college degrees, that they have had three years of satisfactory engagement on salary in music therapy previous to December 31, 1960.

(2) For music therapists with a college degree, that they have had one year of satisfactory engagement on salary in music therapy previous to December 31, 1960.

(3) For music therapists with a degree course in music therapy, that they have completed all requirements for the degree. An official college transcript of academic courses and clinical training must be attached to the form.

(4) For educators, that they have directly to do with music therapy, administratively, pedagogically, or clinically.

APPLICATION MATERIALS

Application blanks may be obtained from Dr. E. Thayer Gaston, Chairman, Committee on Registration, Department of Music Education, The University of Kansas, Lawrence, Kansas.
Appendix

CONSTITUTION AND BYLAWS OF THE
NATIONAL ASSOCIATION FOR MUSIC THERAPY

Revised, 1961

ARTICLE I
Name

The name of the organization shall be National Association for Music Therapy.

ARTICLE II
Purpose and Objectives

Section 1. The purpose of the Association shall be the progressive development of the use of music in medicine, and the advancement of research, interests, and standards of music therapy.

Section 2. The objectives of the Association shall be those which aid medical treatment most effectively toward patient welfare, improvement, and rehabilitation.

ARTICLE III
Membership

Section 1. Membership in the Association shall be of nine classes: active, associate, student, contributing, sustaining, life, patron, honorary, and music club affiliate.

Section 2. Membership privileges and annual dues shall be prescribed in the Bylaws of the Association.

ARTICLE IV
Officers

Section 1. The officers of the National Association for Music Therapy shall be elective and appointive. The authority and duty of each officer shall be such as is defined in the Bylaws.

Section 2. The elective officers of the Association shall be a President, President-Elect, two Vice-Presidents, a Recording Secretary, and a Treasurer. They shall be elected by ballot during a regular annual meeting and, following the election at the 1959 annual meeting, shall continue in office for a term of two years, or until the next subsequent election.

Section 3. No elective officer with the exception of the Treasurer shall hold the same office for more than one term.
SECTION 4. Elections shall be conducted as stated in the By-laws.

SECTION 5. The appointive officers of the Association shall be an Editor, an Editor of the Bulletin, an Archivist, a Parliamentarian, and a Publisher who also may be Acting Business Manager. They shall be appointed by the President, with the approval of the Executive Committee, during the first month following the Annual Meeting.

SECTION 6. Appointive officers may hold the same office for more than two consecutive terms at the discretion of succeeding administrations.

ARTICLE V

Executive Committee

SECTION 1. The Executive Committee shall consist of twenty-two members: the President, the President-Elect, the immediate Past-President, the two Vice-Presidents, the Recording Secretary, the Treasurer, the Editor, the Editor of the Bulletin, the Chairmen of the Research, Education, Public Relations, and Certification-Registration Committees, seven representatives elected from Regional organizations, and two Members-at-Large. The terms of the seven Regional Representatives and the two Members-at-Large shall be for three years; no Regional Representative or Member-at-Large may immediately succeed himself.

SECTION 2. The Executive Committee shall have power to transact the general business of the Association, shall be responsible for the management and control of its funds, and shall be empowered to appoint assistants to any officer of the Association.

SECTION 3. Any vacancy existing on the Executive Committee at the time of the Annual Meeting shall be filled by the Convention at its regular election. A vacancy occurring during another time of the year may be filled by Executive Committee appointment to complete the prescribed term of service.

ARTICLE VI

Advisory Board

SECTION 1. There shall be an Honorary Advisory Board of five members for consultation on major policies. They shall be appointed annually by the Executive Committee to serve for one year, to be chosen from suggestions offered by the general mem-
bership, and may be appointed to succeed themselves immediately, or subsequently, at the discretion of succeeding Executive Committees.

**ARTICLE VII**

**Meetings**

**SECTION 1.** Annual meetings of the Association shall be held at such time and place as shall be determined by the Executive Committee.

**SECTION 2.** Special meetings of the Association shall be called by the President if requested by seven (7) members of the Executive Committee or upon a signed petition by fifty (50) paid-up active members of the Association. The call for the special meeting must state the business to be transacted and no business shall be transacted except that specified in the call.

**SECTION 3.** Special meetings of the Executive Committee may be called by the President, or upon the joint request of not less than seven (7) members of the Executive Committee.

**ARTICLE VIII**

**Quorum**

**SECTION 1.** Executive Committee. Nine (9) members of the Executive Committee of which at least five (5) must be officers, shall constitute a quorum.

**SECTION 2.** The normal quorum of the Executive Committee plus five per cent (5%) of the active membership of the Association shall constitute a quorum for the annual business meetings. At no time shall the lack of a quorum at a nonbusiness session prevent those present from proceeding with the program of the day.

**ARTICLE IX**

**Amendments**

**SECTION 1.** This constitution may be amended at any Annual Meeting by a two-thirds vote of the active members present, the proposed amendments having been submitted to the membership at least four weeks in advance of the meeting.

**SECTION 2.** Bylaws may be adopted, amended, or repealed at any session of an Annual Meeting by a two-thirds vote of the active members present, the proposed changes having been announced at least twenty-four hours prior to said session.
BYLAWS

ARTICLE I

Membership

SECTION 1. Active membership shall be open to all persons professionally engaged in the use of music in therapy including music specialists, therapists, physicians, psychologists, administrators, or educators, and shall provide the privileges of participation in the activities of the Association, the right to vote, to hold office, and to receive all issues of the NAMT Bulletin and the Annual Book of Proceedings.

SECTION 2. Associate membership shall be open to all persons who are interested in the purposes of NAMT but who are not professionally engaged in the use of music in therapy. Such persons as music therapy volunteers, private music teachers, public school music teachers, and any other musicians, interested in supporting the program of the Association, are usually included in this type of membership. Such membership shall provide for admission to conventions of the Association and all issues of the NAMT Bulletin, but does not include the right to vote or to hold office.

SECTION 3. Student membership shall be open to persons enrolled in music therapy degree programs at tentatively approved or fully approved institutions. Student members are entitled to receive all issues of the NAMT Bulletin and to attend meetings and programs of the Association but shall not have the right to vote or to hold office.

SECTION 4. Contributing membership shall be open to individuals who contribute $25.00 annually to the support of the Association, and shall have rights and privileges at whatever type of membership he qualifies.

SECTION 5. Sustaining membership shall be open to individuals, organizations, institutions, or business firms which contribute $50.00 annually to the support of the Association. Sustaining membership may include an individual membership assigned to a person designated by the sustaining member organization, institution, or firm. Such individual membership shall convey to the person to whom it is assigned rights and privileges at whatever type of membership the designate himself would qualify.
SECTION 6. Life membership shall be open to individuals upon the payment of $100.00. A life member shall have rights and privileges at whatever type of membership he qualifies.

SECTION 7. Patron membership shall be open to individuals, organizations, institutions, business firms, or foundations contributing $500.00 or more. These funds may be used for scholarships, endowments, research, or special projects as designated by the donor with the approval of the Executive Committee. Patron membership may include an individual membership assigned to the person designated by the organization, institution, firm, or foundation. Such membership shall convey to the person to whom it is assigned rights and privileges at whatever type of membership the designate would himself qualify.

SECTION 8. Honorary life membership may be conferred upon any person in recognition of distinguished service in the field of music therapy. Such election shall be made by the Executive Committee and be confirmed by the Association at a regular business session. Honorary life members who qualify for active membership shall have all the rights and privileges of such membership without the payment of annual dues. Honorary life membership shall not be conferred upon more than one person in any one fiscal year.

SECTION 9. Music Club affiliate membership shall be open to all music clubs interested in supporting the objectives and purposes of NAMT and contributing $15.00 or more annually to the Association. Rights and privileges shall be the same as those for Associate Membership when the membership is listed in the name of an individual club member.

SECTION 10. Membership privileges may be revoked by a two-thirds majority vote by ballot of the Executive Committee, when after proper submission of charges, provisions of opportunity for self-defense by the member(s) concerned, it has been shown that such membership privileges have been abused and/or the general good of the Association has been harmed.

ARTICLE II

Dues

SECTION 1. Annual dues for Active members shall be fourteen dollars ($14.00), for Associate members three dollars ($3.00), and for Student members two dollars ($2.00).
SECTION 2. The membership year shall coincide with the fiscal year.

SECTION 3. Members failing to pay dues by November 15 shall be sent a second notice by the Treasurer, and those not paying by the following January 1 shall forfeit all rights of membership, including receipt of the NAMT Bulletin and the Annual Book of Proceedings.

SECTION 4. Persons who have forfeited rights of membership as active, associate, or student members because of nonpayment of dues shall be able to reinstate themselves with payment of dues of the current period plus the back-payment for one year.

ARTICLE III

Duties of Officers

SECTION 1. The regular term of office of all officers shall commence at the adjournment of the Annual Meeting at which they are elected.

SECTION 2. The President shall preside at Annual Meetings or Conventions of the Association; call and preside at meetings of the Executive Committee; appoint, with the approval of the Executive Committee, all appointive officers, and all Standing and Special Committees with the exception of the Research Committee, designating the Chairman of each except where otherwise indicated by the Bylaws, and be ex-officio member of the same without a right to vote; and perform the other duties implied by his title.

SECTION 3. The duties of the President-Elect shall be to assist the President as requested, to study the duties of the President in order to be prepared at the suitable time to take over the responsibilities of this office, and to assume all duties of the President in case of the resignation, disability, or absence of the President. In addition, the President-Elect shall serve as chairman of a continuing Committee on Constitution and Bylaws Revision.

SECTION 4. The First Vice-President shall succeed to the Presidency in case of the disability or resignation of both the President and the President-Elect; serve as Program Chairman, taking complete charge of program planning for the Annual Meeting, conferring on all details of management with his Chairman of Arrange-
ments and Special Convention Committees, and supervise the finances of the Convention; and shall have such other duties as may be assigned to him by the President and the Executive Committee.

SECTION 5. The Second Vice-President shall succeed to the Presidency in case of the disability or resignation of both the President and the First Vice-President; serve as membership chairman; and carry out such other duties as may be assigned by the President and the Executive Committee.

SECTION 6. The Recording Secretary shall keep the minutes of all business meetings of the Association and all meetings of the Executive Committee; send copies to each member of the committee within thirty (30) days; collect all papers presented before the Association and deliver them to the Editor, or appoint a reliable person for this responsibility, with the approval of the Program Chairman and the Editor.

SECTION 7. The Treasurer shall pay all bills authorized by the Executive Committee; keep an itemized account of all receipts and disbursements; send statements of dues to all members on September 1; notify delinquent members on November 15 that their names will be removed from the rolls if dues are not paid by the following January 1; present a monthly financial report to the President, and a statement to the Executive Committee each six months; and present a written report to the Association at the first business session of the Annual Meeting. The book in which the record of receipts and disbursements for the year has been kept, together with the checks and vouchers, also the annual report of the Treasurer, shall be submitted to the Auditing Committee in sufficient time for an accurate report by that committee at the annual meeting of the Association.

SECTION 8. A. The Editor shall serve as Chairman of the Editorial Committee and shall be responsible for the editing and the supervision of the publication of the Book of Proceedings.

B. The Editor of the Bulletin shall serve as a member of the Editorial Committee and shall be responsible for the editing and the supervision of the publication of the Bulletin.

SECTION 9. The Archivist shall keep in a secure place all items of historical interest to the Association, such as programs, newspaper and magazine articles, photographs, items of correspondence, and supervise suitable displays, as requested, for NAMT and other conferences.
SECTION 10. Officers, upon retiring from office, shall arrange to confer with their successors during the Annual Meeting, to clarify procedures and responsibilities, and shall deliver to their successors within two weeks all record books, papers, and other property belonging to the Association.

ARTICLE IV

Committees


SECTION 2. The Auditing Committee shall consist of three members, one to be designated as chairman, appointed by the President with the approval of the Executive Committee for a term of one year. This Committee shall audit the Treasurer's books during the week prior to the annual meeting and shall report at the first business session.

SECTION 3. The Education Committee shall consist of three members appointed by the President with the approval of the Executive Committee. Each member shall serve for a period of three years and the appointments shall be made in such a manner that one new member is appointed each year. This Committee shall annually choose its chairman for the year. The chairman of this committee shall automatically become a member of the Executive Committee. The Education Committee shall study and make recommendations to the Executive Committee and the Association concerning the training of music therapists and music aides; confer with the Education Committees in related fields of other Associations; make periodic surveys of the hospital facilities available for interns in music therapy; and assume such other duties in the field of Education as the Executive Committee may direct.

SECTION 4. The Editorial Committee shall consist of five members, the Editor, the Editor of the Bulletin, and three appointed by the President on the recommendation of the Editor. The Editor shall serve as chairman.

SECTION 5. The Research Committee

A. The Research Committee shall consist of five members appointed by the President with the approval of the Executive
Appendix

Committee. At the annual meeting for the year 1952, one member shall be elected for a period of one year, one for a period of two years, one for a period of three years, one for a period of four years, and one for a period of five years. Thereafter, one member shall be elected annually for a period of five years. Any vacancy existing in the Research Committee at the time of the annual meeting shall be filled by the Executive Committee, upon the recommendation of the Research Committee.

B. No member of the Research Committee who has completed a five-year term may immediately be elected to succeed himself.

C. The Research Committee shall, by means of its own membership and such Association committees and other members as it may call into cooperation, conduct studies and investigations in the use of music in all forms of patient treatment, both by itself and in conjunction with other therapies; in the effect of music upon normal and abnormal people; and in such other fields that might have a direct bearing upon music as a therapy. It shall report and make recommendations to the Executive Committee, and shall serve in an advisory capacity to that body. All publications of the Committee shall require the approval of the Editorial and the Executive Committees. The Research Committee shall convene at the time of the annual meeting and at such other times and places as may be deemed necessary by the Committee. The Committee shall elect its own chairman each year. The chairman of this committee shall automatically become a member of the Executive Committee.

SECTION 6. A Public Relations Committee, with one member designated as Chairman, shall be appointed annually by the President, with the approval of the Executive Committee, for a term of one year. The chairman of this committee shall automatically become a member of the Executive Committee. The Public Relations Committee shall be responsible for disseminating information concerning Association activities to the public through the press and other agencies, assist in the publication of pamphlets and brochures when requested by the Executive Committee, and shall foster favorable relations between the Association and appropriate organizations, and the public at large.

SECTION 7. The Certification-Registration Committee shall consist of three members appointed by the President with the
approval of the Executive Committee. Each member shall serve for a period of three years, and no member shall serve for more than two terms in succession. The election shall take place in such a manner that one new member shall be elected each year. The Certification-Registration Committee shall annually choose its chairman for the year. The Chairman of this Committee shall automatically become a member of the Executive Committee. Any vacancy occurring during the year shall be filled by Executive Committee appointment.

The Certification-Registration Committee shall (1) establish standards and procedures for the certification of Music Therapists, and (2) institute formal approval of training programs. This Committee shall work in close cooperation with the Education Committee, and the actions of this committee shall be subject to the approval of the Executive Committee.

SECTION 8. The Clinical Practices Committee shall consist of three members appointed by the President with the approval of the Executive Committee. Each member shall serve for a period of three years and the appointments shall be made in such manner that one new member is appointed each year. This Committee shall study and make recommendations to the Executive Committee and the Association concerning clinical practices in the various fields in which music is employed in therapy.

SECTION 9. The President, with the approval of the Executive Committee, may select other committees from time to time for which there is a special need.

SECTION 10. Only active members of the Association are eligible for membership on any standing committee.

ARTICLE V
Elections

SECTION 1. A Nominating committee of five members composed of Past Presidents of the Association, shall be appointed by the Executive Committee, one of whom shall be designated as chairman by the President.

SECTION 2. The nominating committee shall present the name of one nominee for each of the five offices. Additional nominations may be made from the floor.
SECTION 3. The nominating committee shall present four candidates for the two Members-at-Large positions on the Executive Committee every three years when due. The two nominees receiving the largest number of votes shall be declared elected.

SECTION 4. The Nominating Committee shall make its report at the opening general business session of the annual meeting. At least twenty-four hours shall elapse between the report of this committee and the election.

SECTION 5. Election shall be by ballot of members present.

ARTICLE VI
Official Organ

SECTION 1. The official publication of the Association shall be the Bulletin of the National Association for Music Therapy.

ARTICLE VII
Auxiliary Organizations

SECTION 1. The Executive Committee may, at its discretion, authorize the formation of local, state, and/or regional divisions of the National Association for Music Therapy. The relations of such divisions to the Association may be defined from time to time by the Executive Committee.

SECTION 2. Any auxiliary organizations so authorized by the Executive Committee shall adopt the purposes and objectives of NAMT, shall agree to conform to the Constitution and Bylaws of NAMT, and shall submit a copy of their Constitutions to the Executive Committee for formal approval.

ARTICLE VIII
Fiscal Year

SECTION 1. The fiscal year shall be from September 1st to August 31st.

ARTICLE IX
Rules of Order

SECTION 1. Roberts Rules of Order Revised shall be the authority for all questions of procedure not covered by these Bylaws.
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