

**Live Arts Experiences:**  
**Their Impact on Health and  
Wellness**

3rd Edition

June 2000

Hospital Audiences, Inc. (HAI)

Michael Jon Spencer, Founder & Executive Director

*Aldous Huxley and Christopher Isherwood asked us to play at a Veterans Hospital, in a ward with severe catatonic patients who didn't move from a position that they were sitting in for days....What they wanted to determine,Huxley and Isherwood, was whether live musicians playing for them made more of a difference than canned music....Shortly after we started playing the doctors got very excited because people were tapping their feet to the beat....Then all of a sudden one guy got up and took the trumpet out of our trumpet player's mouth and started playing and obviously he had never played before but for some reason he was making some kind of rhythmic sense....Well you should have seen the joy of these doctors when this happened because this is someone who had shown no interest in anything and had responded to nothing....They recorded our performance and then came back and played the recording to the exact people in the same room at a later date and there was no response.*

**-Dave Brubeck**

## Foreword

On the occasion of its 25<sup>th</sup> anniversary, HAI (Hospital Audiences, Inc.) hosted a symposium which resulted in the publication “ Hope and Inspiration through the Arts; A Vision of Health, Healing, and Wellness.” These were the first steps toward the later creation of a monograph to make explicit the underpinning of HAI’s work: live arts experiences. The first edition was made possible by a grant from the (federal) Center for Mental Health, Dr. Bernie Arons Director. The monograph draws on the thoughts of performing and visual artists and physicians, as well as reviewing and citing the latest medical research. Taped phone interviews generated transcripts, from which many of the quotes were taken. Other quotes were from pre-existent sources (see notes and bibliography).

A second, slightly abridged edition, that was made possible by The Pfizer Medical Humanities Initiative, a program directed by Mike Magee, MD, focused on the doctor-patient relationship and the selection and training of humanistically and scientifically balanced physicians. This edition included a pivotal research study conducted by Lars Olov Bygren of Umea University in Sweden, released after the initial publication. Pfizer put the second edition on its website, in addition to publishing a hard copy.

Work on a third edition has been in progress for some time, the pace accelerating in recent months due to the explosive growth of the Internet and its considerable threat as a substitute for live arts experiences.

This third edition is being made available on the Internet to minimize distribution costs and maximize general availability. Though it may appear strange that with so much of the discussion focused on the threat posed by the Internet, it nevertheless drives home the point that the Internet is a magnificent tool for the acquisition and dissemination of information, but not as a means to provide substitutions for live arts experiences. Speculation abounds, especially in the composite picture that this manuscript created by connecting many diverse fields of thought, some with their own controversies.

I am especially grateful for the assistance of Rachel Udell whose research and dedication is formally acknowledged, especially in the additional material on the Internet and mediated culture, a new term developed in this edition.

Special thanks to Ruth DiRoma, Senda Jarmuth, Bobbi Kraus, Mike Magee, M.D., Jillian Osorio, Noah Potter, Alvin Reiss, Liz Siggins, Joanna Spencer, Celia Wren, Kinha Yiu, and above all, Bernard Arons, M.D.

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## Introduction

In February 2000 the Mayo Clinic announced a study conducted over a thirty-year period which demonstrated that people who are pessimistic have a 19% increased risk of death; that people who are optimistic live longer. Earlier, another dramatic statistic emerged in New York City which reported a 50% increase in the number of deaths in the first week of '00 in contrast to the number reported in the same week one year ago. Such a statistic suggests that people “held on” to life, postponing death in order to usher in this new millennium.

Still another study recently published in Sweden, a follow-up to an earlier nine-year study tracking thousands of individuals over the course of 12 years, found that people who frequently attend museums, art exhibitions, concerts and movies live significantly longer than those who do not. **These findings even exist when controlled for age, chronic illness, smoking, physical fitness, social networks, and reading books and periodicals.**

Taken together these statistics suggest an important connection between the mind and the body, and through them, the impact of certain live arts experiences on the ultimate measure of health and wellness: longevity. The question may be asked whether this enhanced survival results from the type of person who is optimistic, who engages in life, or from the enjoyment of the *live* art itself.

Speculation suggests it might be both...that the live art experience with its inherent rewards combined with the personality of the optimist serve to enhance the effect of each on the other. The precise manner in which the mental and emotional worlds of a person filled with hope, optimism, and meaning connect with one's body to have such a profound effect on longevity is a subject addressed at length in the field of complementary and alternative medicine. In this third edition of the monograph, the “mind-body connection” is explored through four phenomena: the placebo, expectancy theory, dissociative states, and hypnosis. It is through this innate “hard wiring” of the human that mental/emotional states impact upon the entire human organism.

Health emerges from hope, optimism, laughter, connectedness, support, commitment, self-worth, a sense of control, and perhaps something more: the perception that life has meaning...What enriches our lives is also good for our health.<sup>1</sup>

Live art experiences exemplify this enrichment:

### **Before the event, through**

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<sup>1</sup> William Poole, quoted in Katherine Butler, ed. *The Heart of Healing*. The Institute of Noetic Sciences. Atlanta: Turner Publishing, 1993, p. 11.

1) the **energies** needed “to go out” to a live event,

**At the event, through**

- 2) the **presence and responses of an audience** in the environment of a venue designed to attract, hold, and focus the attention of the audience,
- 3) the **communication** and **interaction** between performer and audience,
- 4) the **dramatic uncertainty** of a live performance,
- 5) the **concentration** demanded by a live arts experience,
- 6) the **richness of the aesthetic stimuli** of the live arts experience with a greater range of multi-modal sensory input, resulting in a more intense emotional/physical response,

**Subsequent to the event, through**

- 7) the **intense sensory input** and its encoding within the brain enabling the recall at a later date of that event and its emotional associations.

With the increasing pace of technological innovation, the live arts experience is becoming progressively threatened. As people spend more and more time in front of their computer consoles for work and leisure, their time and incentive to culturally enrich themselves in a live setting is diminished proportionately.

Recent events have propelled this concern to the forefront of public awareness. In one seven day period in January '00, two mergers and one enterprise were announced:

- AOL's acquisition of Time-Warner;
- SFX, the largest promoter of live arts and sports events, merging with World Online International, one of Europe's leading internet communications companies; and
- Broadway Television Network and Broadway Digital Entertainment companies formed for pay-per-viewing of Broadway shows. All include in their goal the presentation of the arts, especially live art experiences through the Internet.

The following example drives this point home. On June 13, just as the monograph was being issued to HAI's website, the New York Times revealed that due to cutbacks on classical music releases,

66 of the most prestigious American symphony orchestras and opera and ballet companies have reached an agreement with the musicians union that allows them to turn to the Internet as a prime distribution vehicle for their work. These performances would

potentially include live concerts available through what is known as “streaming audio....”<sup>2</sup>

This “streaming audio” will allow users to listen to live performances, albeit, initially through their computer’s speakers. “Streaming audio” is emerging in opposition to its impractical alternative: the download. As Allan Kozinn writes,

Using a 56K modem, which is standard on most computers on a conventional telephone line, it can take upwards of eight hours to download an hour of music encoded as MP3 files.<sup>3</sup>

A recent study conducted at Stanford University demonstrated that Internet access is on the rise, showing that over half of the population is already connected. After viewing the results, Norman Nie, principal investigator of the study remarked, “Everybody is going to be a user soon, and access is growing by successive birth cohorts.” The study, meant to monitor the ways in which the Internet is currently having an impact on society, revealed that the more time people spend using the Internet, 1) the more they lose contact with their social environments, 2) the more time they spend working in the office and at home, 3) the less time they spend watching T.V. and consuming other traditional media, and 4) the less time they spend shopping in stores and commuting in traffic.

Why are people spending more time on the Internet? One reason is for commerce: businesses are encouraging the development of “telecommuting” whereby employees are encouraged to work at home a certain amount of time. More resources are going into telepurchasing. Another reason is for socialization: communities are being created in cyberspace in which a person or constructed personality interacts with others, resulting in a “teleidentity,” as termed by media sociologist Judith S. Donath<sup>4</sup>. Often this form of disembodied communication has ambivalent effects on the degree of satisfaction attained by such interaction. In some cases the communicants remain anonymous, in some instances they meet in the ‘real world.’ This human need to be connected remains, with face-to-face interaction significantly diminished.

The historical trend of technology increasing accessibility to the arts has been accompanied by yet another: the replacement of the imagination by technology. The imagination has been the medium by which one becomes immersed within a work of art. However, with technology providing increased access to and distribution of information made possible by the Internet, the Internet will soon combine with the intensified sensory stimulation of Virtual Reality technology. Such a merger would produce the most heightened technologically immersive experience to date, and could soon be readily available to the average consumer of culture and entertainment. The lure for and threat of

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<sup>2</sup> Allan Kozinn, “Classical Concerts and Recordings Seek an Audience on the Web,” The New York Times, June 13, 2000.

<sup>3</sup> Kozinn, “Classical Concerts and Recordings...”

<sup>4</sup> Judith S. Donath, “Identity and Deception in the Virtual Community.” Prepared for: Kollock, P. and Smith M. (eds.) *Communities in Cyberspace*. London: Routledge. Accessed from: <http://smg.media.mit.edu/people/judith/Identity/IdentityDeception.html>.

“mediated cultural experiences,” art filtered through technological media, would then be at its greatest.

The ability of the arts to instill or sustain optimism, provide pleasure and relaxation, and increase one’s ability to cope with life’s challenges by providing hope and inspiration. All are vital to health and wellness, and longevity, as suggested in the studies from Sweden.

# **Part One: Dynamics of a Live Arts Experience**

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# I. Definitions

In the previous editions, a *live arts experience* was defined as one that “includes a full range of visual and or aural stimuli from the original source, not altered by some intermediate media.” A *reproduction* was defined as “an approximation, abstraction, or documentation of an art object (both visual and performing), often enhanced and edited to give the illusion of perfection.” In this edition, these definitions are changed and expanded .

***live arts experience:*** a cultural event in which beholder and art object/performance are present in the same physical and temporal space.

***mediated arts experience:*** an experience in which the art object or event is filtered through a technological medium external to the object or event. The perception may be contemporary with the event or subsequent to it. That is, the perceiver may experience the event through media as the event is actually happening or at a later date. The term *reproduction* as defined in the previous edition is hereby subsumed within our definition of a *mediated art experience* and will be reserved only for copies of physical objects.

Art experienced “live” or “live art” is readily comprehensible when it refers to music and the performing arts: listening to music performed by “live” musicians at a concert instead of music played over a sound system at home, or, in the case of ballet, viewing “live” dancers at a performing arts center rather than seeing them on TV. But the concept becomes a little less clear when referring to the visual arts, e.g. an original painting viewed at a museum rather than in a book, or a film seen at a movie theater rather than on TV. For these art forms, it becomes far more useful to discuss the difference between the live art experience versus the mediated art experience.

**The aesthetic impact on mental and physical processes depends upon both the beholder and the context or environment in which the art is experienced. Thus the focus shifts from the art (object) itself to the viewer/listener and the context, situation, or environment in which the art is experienced.** This context or environment involves two factors: the type of location, e.g. a public venue dedicated to the arts, such as those where most live arts experiences take place (in contrast to one's home where one tends to view art reproductions) and the presence of an audience during the experience. These concerns lead us to describe films seen in a movie theater as Live Arts Experience, because of the technology and design of a movie theater, and because of the presence of an audience, in contrast to viewing a particular film at home over TV or through a VCR.

## II. Audience

The significance of the audience was the factor most emphasized by interviewees as the essential difference between art experienced live vs. mediated.

### A. Dynamic Connection Between Performer and Audience

**Dave Brubeck, pianist:** I've always said that the audience was the fifth member of my quartet.

One of the primary elements of a live performing arts experience is the communication and interaction between the performer on stage and the audience. There is no such interaction when the same work of art is experienced through electronic media. This interactive dynamic affects both performer and audience, each of whom communicates one to the other through a series of continuing interactions with one another.

There is no way of replicating the live experience, other than being there. That's what the live experience is; it depends on an audience, it depends on the relationship between the audience and the stage, it depends on what the performer generates; it depends on what the audience generates....<sup>5</sup>

In the concert hall, each motionless listener is part of the performance. The concentration of the player charges the electric tension in the auditorium and returns to him magnified. The public sometimes thinks an artist is a television set—something that comes out, nothing that goes back. They don't realize that if they can hear me, then I can hear them—their coughs, the electronic beeps of their wristwatches, even the squeaking of their shoes. I like the fact that “listen” is an anagram of “silent.” Silence is not something that is there before the music begins and after it stops. It is the essence of the music itself, the vital ingredient that makes it possible for the music to exist at all. It's wonderful when the audience is part of this productive silence.<sup>6</sup>

**Eli Wallach, actor:** A play—you lay it on the line, it's taking a chance, it's daring, there are no cuts and then reediting and pasting together pieces. A live response from an audience between an actor and an audience is a wonderful thing. I remember one incident where I came out on stage—and I'm far sighted - and I saw a man sitting in the front row with his head down, and I thought to myself ‘I just came on stage, why is he asleep? I can't believe this—am I so boring?’ All during the play, all I could think of was this one man. The stage manager came back at the end of the show and said, someone here wants to meet you, and I thought if that's that man, I'll kill him. And the man came backstage—it was him—and he said I enjoyed the show tremendously, I loved every second of it.

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<sup>5</sup> John Goberman, quoted in HAI's Hope and Inspiration Through the Arts, Page 16.

<sup>6</sup> Alfred Brendel, quoted in Alvarez, A. “The Playful Pianist,” (*The New Yorker*, April, 1996) p. 53.

And he was blind. Which taught me a lesson—that each person out there in the dark is in communication with you directly.

**Bill T. Jones, choreographe/dancerr:** On stage I truly feel there is a transforming experience, a direct communication between one group of living human beings, performers on stage and those in the audience.

**John Hall, former trustee, Music Performance Trust Funds:** Live theater to me is the electricity that happens between the audience and the performer, and the more electricity that happens, the better the performance becomes. Ask any professional musician or actor or dancer. Where do they always want to perform? They want to perform in front of a live audience.

**Sherrill Milnes, baritone:** When the audience is full your mind delivers to your mechanism, your soul and your voice, some different signals. This is for real.

## B. Charisma of the Performer

Part of the mystery and excitement of artistic communication is the phenomenon of “charisma” or “magnetism,” which some artists seem to exude when they appear in person in front of an audience. It cannot be captured and conveyed by electronic media.

**Tom Frost, record producer:** When an artist like (Vladimir) Horowitz walked onto the stage there [was] always a certain electricity in the air. You [could] feel the excitement of the whole audience. There [was] a certain electricity that artists of that type generate. Their presence excites people....There is some kind of chemistry at work that communicates even without the playing.

**Billy Taylor, pianist:** Listening to recordings at home is not the experience that one gets from just being in the same room with a performer. The experience that one gets from the in-person aspect of it is more like a conversation. Certainly you can have a very fine conversation on the telephone, but if you were talking and having that same conversation across the table from someone you would see the expression, you would have all of the physical nuances of being in the presence of the person that you're communicating with and who's communicating with you.

## C. Uniqueness of Each Live Performance

Even in performances that continue over an extended period of time, each night is a new experience for the artist.

**Eli Wallach, actor:** There's one thing that changes every night and that's the audience. I'm like a magician who knows the trick, the audience doesn't know it, and it's my pleasure in deceiving them, or amusing them, or titillating them, and it's theirs to get.

**Jane Alexander, actress and (former) Chairman, National Endowment for the Arts:** People always wondered how I could do long runs (as an actress) and I said

because the audience is different every single night. You get attuned to the sensitivity of an audience. Audiences send some kind of wave across to you that let you know in some ways how much you can grow. It's very exciting.

**James Earl Jones, actor:** From the stage you can tell whether you touched an audience and they touched you.

## D. Interaction Among Audience Members

### 1. Social Significance of the Group

**Dr. David Spiegel, professor of psychiatry:** We are fundamentally social creatures. It is our biological heritage. We're not particularly strong or fast or anything else. But we communicate elaborately with one another. We can think, plan, and remember. Our infancy is a period of prolonged dependence on other people. Our social skills are very much connected with our survival skills because of the way we're constructed. Any group or social event underscores that part of who we are. It is our social environment.

An audience not only helps to fulfill the human need for social experiences but can also provide specific social opportunities. Congregate human experiences may have begun with religious rituals, with rites of passage. In modern times, public ceremonies such as weddings, funerals, ball games, coronations, inaugurations, parties, holidays, etc. retain some of the significance of the early ceremonies. Part of the ritual—in the case of gallery openings, a night at the opera, or a rock concert, etc.—is simply seeing and being seen.

**David White, arts administrator:** When you're in a theater you're very aware of the collectivity of people around you, you're aware of anticipating something that everybody else is anticipating....When you look at theater in the round where half of your landscape are other audience members watching you as well as the action, you're watching them as well as the action. That's sort of an emblem of the experience. You may not be watching, but you will notice, you will look to see if other people are laughing.

### 2. Influence of the Group on Its Members' Perceptions

Audience members also serve to influence and reinforce one another's reactions to a particular event. Being a part of an audience, knowing that the performer is reacting to the audience response, heightens awareness. In addition to responding to a performing art form itself, the brain is also registering the reactions of the audience, a process which influences and accentuates one's perceptions and emotions. (This is perhaps the theory underlying the practice of dubbing "canned laughter" on TV; it's the producers' way of saying "this is funny...laugh!!!") There is a sense of communication and interaction. It is a real, two-way process heightened by the audience sounds of breathing, body motion/stillness, laughter, sobbing, applause, or requested participation.

**Wayne Ruga, architect:** As human beings, we have an extremely dynamic and exquisite inter-relationship with our environment that is occurring in every nanosecond of our experience, whether we are awake or asleep; and that dynamic relationship is a

reflection of our environment and our environment of us; we are really one and the same. It influences who we are and how we behave. In our modern world we are anesthetizing ourselves to this exquisite relationship. This is why the experience of art is so important. It is not just that we are looking at something and that image is the only significant thing that's happening. Rather, we're subjecting ourselves to an experience of receiving energy and causing an experience which is more than that we had before we subjected ourselves to the art. (At a live performance) the body responds not only to being in front of a performance but being in close proximity with so many other people who are having a similar experience.

At museums and galleries, the assemblage of a group of people around a painting, drawing, print, or sculpture accentuates or focuses attention on the piece itself. The mere fact that so many people are concentrating on the object heightens awareness. The fact that one has gone through significant logistical efforts to stand in front of a given work of art also focuses sensory equipment.

### III. Event Itself

#### A. Dramatic Uncertainty

A live performing art event is filled with the visceral excitement of the unexpected and a sense of discovery. A recording or video of an event is always the same; the event has already happened; after the first hearing or viewing, the visceral excitement of the unknown is gone. A parallel might be watching a video of the Super Bowl after you know the final score. Humans may have a need to experience “uncertainty.”

**Dr. Robert Shomer, psychologist:** The human central nervous system is best developed and maintained by an optimal level of stimulation. If the environment changes too rapidly and too radically the brain can become overwhelmed by a flood of stimuli. Within these limits, the more uncertainty and novel stimuli we are exposed to, the better our nervous system is prepared to cope with any potential changes, including emergencies. Novelty is the crucial ingredient for sustained brain development. In addition to greater synaptic development, the flexibility and adaptability that results from novelty has positive evolutionary survival value. There is a considerable amount of research that supports the contention that people who regularly expose themselves, or are exposed to, novel and complex experiences, function at higher levels throughout their lives and well into old age... With recorded presentations, uncertainty is eliminated, you already know it is going to be a good performance. With a live presentation, there is a degree of suspense; you don't know what is going to happen. The very uncertainty of live performances not only adds to their attraction, but may also have beneficial effects on our overall well being and functioning.

#### B. Spontaneity

Uncertainty in the form of spontaneity is intrinsic to some kinds of art. For example, spontaneity is the very essence of jazz, which raises the unexpected to an art form called improvisation; no two renditions of the same work are ever the same, by design. Much of

the excitement of jazz comes from this unpredictability. Uncertainty is intrinsic to the work of some circus performers; an audience member never knows what will happen during the performance of trapeze artists, for example, adding to the tension of their “death-defying” act. In the performing arts, reproductions are like a snapshot of a moving object; the image is forever frozen and never changes.

**Mark Morris, choreographer/dancer:** Dancing responds to the music and conversely the music to the dancing. Where there is a tape recorded score (as accompaniment) the dance is always going to be exactly the same. If you have a favorite recording, you know exactly when the next song is going to start, in what key, at what tempo. It's fine: it's a record of something as opposed to that thing itself. It's documentation, and that's why I believe they're called records. It's one version and it's one that has probably been doctored in the studio.

**Jonathan Borofsky, sculptor:** I think ultimately if we learn to be spiritual beings, we learn to live in the present.... Everything else which kind of records the present and passes it on to other people second-hand, whether it's through a screen or through book print.... People who live through reproductions don't quite live in the present because they're always looking at things that are frozen in the past.

## C. Concentration

Live artistic experiences are highly structured events that demand the listener's/viewer's extended concentration. Art experienced through media at home does not demand much concentration or energy or effort—perhaps as little as the act of reaching for a button or opening a book. Lifestyles have evolved which take “multitasking” as the norm...listening to music or watching TV while doing something else. Even if one wanted to focus only on one thing, there would be the inevitable distractions such as telephone calls, beepers/pagers, the demands of people or pets, the lure of the refrigerator, the ringing of the doorbell, ambient sounds. There is much less likelihood of uninterrupted concentration at home than at a theater or concert hall. To ensure this, live performing arts venues ask the audience to turn off their pagers/beepers before the performance begins.

The way in which a live arts experience concentrates the listener/viewer is by “framing” the art, which can be physical, and/or temporal, depending on the environment or context. At performing arts events, the stage focuses the attention of the listener/viewer in one direction. Lighting and the dampening of outside sounds eliminate distractions. A museum or gallery can “frame” the presentation of a work of art by placing it so our visual field contains no other object, or by hanging it next to another work selected to emphasize some common trait (a row of Monet's successive paintings of Notre Dame, for example). A sculpture can be similarly placed in an open space permitting and encouraging us to view it from different angles. Even at site-specific events, the physical context or environment “frames” the event. All such placements serve to accentuate the work of art and reduce competing sensory distractions.

This concentration holds true for films seen in movie theaters rather than on TV or VCRs at home.

**Jeffrey Lyons, film critic:** Going to a (movie) is a shared event. You get up, you leave the house, you meet somebody, you pay, you sit down in the dark. There are rules of decorum. You must pay attention. If you miss something, it's gone, you can't stop and rewind the VCR. You can't get up and go to the bathroom and put it on pause. You get a sense of events unfolding.

## D. Multi-Sensory Experience

Live arts experiences are multi-sensory. The brain perceives, encodes, and recalls them in a different way than it does art perceived through mediating technology.

**Dr. Mark Jude Tramo, neurobiologist:** The sensory stimulation from a live artistic experience is multi-modal—auditory, visual, tactile, olfactory, and kinesthetic. Each stimulus modality as well as specific combinations of stimulus modalities touch the audience in a way that cannot be reproduced. For example, when one listens to an audio reproduction, the natural reverberations of musical instrument sounds that would fill the concert hall front, side, and back are missing. Acoustic information is thus degraded. Similarly, for visual stimuli, reproductions are typically two-dimensional—a whole dimension poorer than that of live visual experience! Subtle tactile, olfactory, and kinesthetic cues that contribute to the Gestalt of real-life experience are entirely lacking. These aspects of sensory experience cannot be achieved with a videotape or computer. Importantly, many have their origins in the social context of a live performance; as such, shared sensations and the collective responses they evoke remind the individual that one is not alone but among many with common thoughts and feelings. Moreover, reproductions provide no cognitive or emotional interactions between audience and performer—no means of communicating, and thus no means of influencing and sharing in the performance itself. Taken together, these sensory and cognitive factors dictate that the experience of a reproduction can never be as rich as the experience of a live performance.

**Dr. Bertram Pepper, psychiatrist:** The live music event is the ultimate multi-modal experience. In the concert hall, in the opera, every sense organ of the body is being stimulated. We're not just talking about hearing and vision; we're also talking about the olfactory sense, concert halls have a smell, people next to you have a smell; there's the kinesthetic sense, of the feeling of the seat under you, of the feeling of the arm-rest under your elbow, there's room for you and your neighbor to share an arm-rest. There's the tactile experience of literally brushing against people in the aisle during intermission. In attending a concert there is a sequencing of events with a climax, which is the actual performance. The brain learns particularly well when the inputs are multi-modal: one remembers, one learns much more in a live experience, because of the multi-modality, in contrast to sitting at home in the living room and listening to recordings or broadcasts.

## IV. Venue of the Live Arts Experience

The live art experience usually takes place at a special location. People receive pleasure and enhanced self-esteem simply by being there. Theaters, concert halls and museums are places to relax, offering relief from the tension of daily existence. Even with their demands for uninterrupted concentration, one goes there for fun or “uplift.” The environments and dynamics are especially designed to focus our attention on the art to be experienced...through seating, lighting, and placement of art or scenes. Mediated art experiences lack these “helpful” structures.

Museum (Web) sites in general are problematic: they function somewhat like exhibition catalogues, offering static records that may be interesting to the serious scholar but are often dull for the casual visitor. They also lack the physical presence of museum architecture that can instill in the viewer a contemplative experience.<sup>7</sup>

## A. Attending a Venue

Attending a cultural venue requires preparation. It starts with the listener’s/viewer’s decision to attend, followed by subsequent expenditures of time, energy, and/or money.

Music demands...from a listener...some preparation, some effort, a journey to a special place, saving up for a ticket....It demands as much effort on the listener's part as the other two corners of the triangle, this holy triangle of composer, performer and listener.<sup>8</sup>

Sometimes people get dressed up in a particular way appropriate to a venue or event. As a result of these logistical considerations, listeners/viewers are primed for the aesthetic experience. They achieve psychological states called “set” in which they are geared up for what follows. This increases the impact of what is experienced, a dynamic in direct contrast to a mediated art experience at home.

However, some aspects of the modern museum may give visitors a less focused artistic experience. A recent New York Times article by Judith H. Dobrynski cited cultural historian Nicholas Fox Weber’s remark comparing museums to shopping malls: “People are used to the shopping mall, where they can walk around and stop where they wish....And you can do that in a museum, whereas you can't in a music or dance performance.”

The Times article went on to examine the current popularity of museums:

Whether visiting the mall, holding the remote control, or grazing before an open refrigerator, Americans are used to picking and choosing their own course.... Nowadays, of course, museums are much more than great art treasuries—and shopping malls. They also convincingly play the part of classroom, meeting place, restaurant, playground, park bench, party palace, cinema, singles bar, conversation provocateur,

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<sup>7</sup>Ben Davis, “The Culture Machine: Science and Art on the Web.” (*Scientific American*, Aug, 1996) pp. 104-108.

<sup>8</sup> Benjamin Britten, quoted in Carpenter, Humphrey. *Benjamin Britten: A Biography*. (New York: Scribner, 1992) pp. 438-439.

travel agent, lecture hall, wine bar, and—when a particularly compelling exhibition or event occurs—the place to see and be seen socially....The age of museums is not to be confused with the age of art or the age of art appreciation. Much museum going is not about art at all. It's simply social, rather like visiting a Barnes & Noble bookstore or meeting friends for a cappuccino. It's entertainment, not enlightenment or inspiration. It's a great date, a fun family outing.<sup>9</sup>

## **B. Lure of Technology to Attend a Live Art Venue**

Venues use technological and programmatic enhancements to increase peoples' enjoyment and comprehension of live arts experiences.

### **1. Performing Arts Centers**

Opera houses are adopting supratitles or subtitles on screens, in order to heighten the emotional impact by providing near simultaneous translations of the libretto, thus creating for the average listener a more complete understanding of the content. Sophisticated “amplification” is being introduced in previously sacred “true sound” settings and outdoor classical concerts are now using peripheral large TV screens, similar to rock concerts.

### **2. Museums**

Museums, which, along with opera, are among the few cultural venues with expanding audiences, have been very successful in using a variety of means to reach out to new audiences.

Examples of engaging techniques include using CD ROMS and computers on site to enable attendees to review a collection, secure information, and map out a tailor made tour. Many museums are also using audio guides, some with new digital equipment, which can be rented by the viewer to provide randomly accessed on-the-spot information to enhance the viewer's understanding and appreciation. This equipment is in addition to docents and tour guides whose ability to speak a multitude of languages, and create tours for special groups like schools, may also enhance the museum experience. To maximize sensory and intellectual dimensions, especially for blockbuster exhibits, museums frequently rely on special design consultants, in addition to their curatorial staff, to help organize the exhibit in terms of layout, placement, background color, lighting, and general flow.

A work of art may offer viewers the same sensory data it has for years, or even centuries, but the context or exhibit in which it appears may differ completely. A blockbuster exhibit is usually a one-time assemblage of art from different museums and private

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<sup>9</sup> Judith H. Dobrzynski, “Glory Days for the Art Museum.” The New York Times 5 October, 1997: Section 2: 1,44.

collections. Part of the excitement of attending such a show is knowing that this is literally a once in a lifetime occurrence.

### **3. Movie Theaters**

Movie theater management is trying to create an environment that draws people out of their homes to attend theaters instead of watching these films at home at a slightly later date on pay per view, premium TV channels, or video rentals. There are an increasing number of multiplexes converting to stadium seating with uninterrupted sight lines, huge screens and surround sound systems made possible by highly raked seating, all designed to create an awesome sensory environment. The goal is to overwhelm the senses by filling the field of vision; enveloping the ears to create a greater emotional/physical impact than if the same film were viewed at home on TV.

## **C. Creation of Social Events and Educational Programs to Attract Targeted Audiences to a Venue**

The social aspect of the concert is fully recognized by concert halls and performing arts organizations and centers, which are enhancing programming through the creation of performances designed for particular markets, including schools, families, ethnic audiences and rush-hour commuters. In their desire to attract new audiences to their live art presentations, cultural institutions have been experimenting with an array of marketing techniques designed to attract particular audiences to particular events. Examples include family night or special family matinees, singles nights, gay or lesbian nights...each designed to create social opportunities tailored to particular needs or the interests of particular groups. These and other initiatives—the distribution of supporting educational materials, opportunities for interaction with the performers prior or subsequent to an event—serve to motivate people to attend, to hold their concentration, and to give them an opportunity to socialize with others of like interests and persuasions.

**Jerri Allyn, performance artist:** Museums have been particularly challenged in the last ten years to revisit their goals as educational centers, as prompted by discussions in the field that led to the publication *Excellence and Equity/Education and the Public Dimension of Museums* (A Report from the American Association of Museums, 1992). They're much more committed to educational and interpretive programming that relates to the general public and the community within which they live than ever before, as well as the museum-going public. This is a great and stimulating challenge for urban museums who have seen city populations grow by leaps and bounds, most of whom are not the wealthy patrons who founded many museums a century earlier. Studies by several art museums on the East and West coasts, for instance, have indicated that the average visitor has a third grade education in the arts. Yet in general, museum tour guides are lecturing in the galleries at a college level. The guide's information literally goes over people's heads. The "general public" is also a casual visitor. They are not artists, art historians, or collectors, and do not have an interest in the details many tours offer. These research studies have prompted the field to exciting experiments with interactive and

engaging techniques in facilitating tours and developing new kinds of relevant programming.

A recent example of innovative museum programming is at the Denver Museum in Colorado. Special projects include puzzles derived from the intricate designs of Navajo blankets and interactive play stations featuring world cultures from the museum's collections in which children are encouraged to touch, explore and create designs taken from the museum's galleries. Those "in the know" are now setting aside millions of dollars to educate not just the mass conglomerations of novice adults, traditionally a museum's largest audience, but too audiences who have been previously ignored. In the case of the Denver Museum, children are the targeted audience, and the curatorial, marketing, and development teams involved have combined their efforts to make the museum a desirable leisure and culturally educating destination for both children and adults.<sup>10</sup>

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**Having discussed the unique attributes of experiencing the arts live, the discussion turns now to the technology, which is creating mediated art substitutes at a breathtakingly accelerated pace.**

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<sup>10</sup> Elizabeth Heilman Brooke, "Lessons; At Art Museums, Education is Fun" The New York Times, March 8, 2000.

## **Part Two: Mediated Culture: Electronic Technology, Accessibility and Immersion**

### **I. Accessibility: Through Copies and Reproductions**

**A. Traditional Media: Painting, Sculpture, Prints**

**B. Electronic Media**

**C. Internet**

### **II. Accessibility: Through Immersion**

**A. Immersion: Traditional Media**

**B. Immersion: Electronic Media**

**C. Immersion: Virtual Reality**

### **III. Implications of the Mediated Cultural Experience**

#### **A. Positive Contributions**

**1. Increased Accessibility**

**2. Increased “mobility”: Access for Everyone to The Museum Without Walls**

**3. Increased Appreciation for the Real Thing**

**a. Before the Event**

**b. After the Event**

**4. Ability to Accentuate subtleties of a**

## **Performance**

### **5. Effectiveness as an Educational Tool**

## **B. Perceptual Limitations of Mediated Art**

- 1. Reduction of Visual and Aural Stimuli**
- 2. Impersonal and Repetitious Quality of Mediated Art**
- 3. Absence of Audience**
- 4. Blurring Distinctions Between Real and Fake**

Two threads have been intertwined within the fabric of the arts as they have developed over the past millennium: 1) the democratization of the arts through technological innovations, such as the printing press, with its increased accessibility to an art object from its original “owner,” the royal or wealthy patron or church, to the masses, and 2) the increased perceptual immersion of the art perceiver into the work of art, art event, or performance thereby increasing their satisfaction in this substitution.

## **I. Accessibility: Through Copies and Reproductions**

### **A. Traditional Media: Painting, Sculpture, Prints**

Since time immemorial works of art have been copied, distributed, deployed and displayed to communicate theological, philosophical, political, and other ideological messages to as broad a constituency base as possible. From the coinage of the Roman empire to the iconography of Byzantium, the reproduced image has played a major role in shaping civilization’s sociopolitical agenda.

Western art in particular has come to rely on the “idea” of the original. In Ancient Greece and Rome, images were often copied from an earlier, more exalted time, to encourage in the viewer a sense of symbolic association.

Hellenistic artists archaized their work to recall the idols of an earlier, purer Greece. Clambering over Roman monuments, Renaissance antiquarians invented many of the Latin inscriptions they ‘copied’ from the ruins before them, anxious to ‘revive’ the glorious things which were alive to the living in antiquity but had become buried and defunct through the lapse of ages....<sup>11</sup>

The act of copying has also served as an educational process for artists throughout the centuries, from Michelangelo to Vincent Van Gogh. As Hillel Schwartz notes, “Edgar Degas, who met Edouard Manet while both were etching copies of Velazquez’s *Infanta Marguerite*, would execute more than 400 copies [of famous paintings] from 290 sources.”

In the mid-fifteenth century with the advent of the printing press the world was suddenly faced with the pregnant possibility of mass distribution. Iconic images from heretofore religiously guarded clerical manuscripts could now be purchased in the marketplace. The

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<sup>11</sup> Richard Dorson, “Fakelore,” in *American Folklore and the Historian* (Chicago: U Chicago, 1971) 3-14, quoted in Hillel Schwartz, *The Culture of the Copy: Striking Likenesses, Unreasonable Facsimiles* (New York: Zone Books, 1996) p. 373.

spread of ideas and learning from the clerical elite to the lay individual was highly facilitated.

A similar situation developed in the middle of the nineteenth century when a series of inventions culminated in the modern photographic process. Photography had a monumental impact on the art world, making visual duplication as easy and fast as a click of a button, and forcing the status of the painter into what was then perceived as a very precarious position. Would painting become obsolete now that the camera could capture “reality”?

## **B. Electronic Media**

The explosion of electronic media in the late twentieth century greatly extended the accessibility to “copies” or reproductions in some form of all the arts. In rapid succession these started with the development and availability of electricity, then almost paralleling one another, the movie, the phonograph, (first cylinders, then 78’s, 33 1/3’s, tapes, CD’s, DVDs ) VCRs, and most recently, the Internet.

## **C. Internet**

The historical trend of increasing access to communication, commerce, and of concern here, the arts, has taken an exponential leap with the development of the Internet. Live arts experiences are being challenged as technological innovations are being used as convenient alternatives and substitutes. As was mentioned in the Introduction, recent events have propelled this concern to the forefront of public awareness. In one seven day period in January ’00, two mergers and one enterprise were announced: AOL’s acquisition of Time-Warner; SFX, the largest promoter of live arts and sports events, merging (and itself being purchased in March ’00) with World Online International, one of Europe’s leading internet communications companies; and publicity on the formation of two companies....Broadway Television Network and Broadway Digital Entertainment for pay-per-view for Broadway shows. All include in their goal the presentation of the arts, especially live art through the Internet.

The Internet provides a powerful lure by reason of the ease of bringing the arts home, an attraction that will increasingly enable the mediated cultural version to substitute for the real thing. Recordings, concerts, movies on demand, are increasingly becoming a mouse-click away as well as museums, galleries, and the home-pages of individual artists and cyber works of art. As this technology merges with that of high definition TV, digital sound, and eventually virtual reality, the impact will be at its greatest.

## **II. Accessibility: Through Immersion**

Whereas the two previous sections discussed increased *physical* accessibility to art through various media, attention is now focused on the mental processes that bring one into *emotional* proximity with the work of art.

## **A. Immersion: Traditional Media**

For millennia, the imagination served as a means of “transporting” the perceiver into the work of art through a process labeled, in the current language of Virtual Reality, *immersion*. One would achieve this immersion through a mechanism called “the suspension of disbelief,” generally used within the discussion of theater and film, connoting the willingness to believe that what was being witnessed or experienced (on stage or screen) was real. The greater the immersion, the greater the impact of the art.

It appears that the historic role of technology within the arts has been to actualize and accentuate this immersive process so as to intensify the aesthetic experience. Perhaps some of the earliest immersions into art were religious or hunting rituals based on a narrative or story experienced through painting, icons, costumes, dances, chants, and oration. These early art forms no doubt emerged independent of these rituals in order to explore the nature of origins, commemorate monumental events, or as expressive vehicles for prayer. Again speculating, these events may have developed into formalized mythology; secular sagas, stories, or fables. A parallel development one could speculate was the formalization of these narratives into plays-rituals that now called for the participants to be a seated or standing audience.

In all of these experiences, the greater the immersion, the greater the ability of the narrative to “grip” an audience participant due to the willingness to believe that s/he were really “there,” within or at the event portrayed. The success of this immersion depended upon the quality of the narrative, the skill of the narrator, and on the extent to which the perceiver used her/his imagination.

Centuries later, following the development of printing, the key to the immersion of the reader into the world portrayed through print media depended upon the reader’s ability to create a personal world of images and events that actualized the narrative. By forming their own “picture” in their mind, congruence between text and images was achieved. Emotional/physical reactions could take place as if the events were being seen, if not wholly experienced.

With the invention of printing, the narrative divided into two paths; written narratives that could now be replicated for widespread distribution and narratives performed which would also continue as drama to be acted, sung, and danced.

In the realm of the visual arts, a variety of different devices were employed to achieve the effect of immersion. During the early renaissance, for example, perspective was introduced in order to present a more life-like view into the scene, as though the viewer were standing before a window through which s/he could watch the events of a scene

unfold, almost as though s/he, while not a participant, were an actual observer of the scene. The French term “trompe l’oeil,” meaning “to trick the eye” developed out of this mentality, that is, to paint so realistically, or rather *illusionistically*, that the beholder is actually fooled. One aspect that distinguished the High Renaissance was the desire to depict a unified pictorial or architectural composition so as to increase the dramatic physical presence of the work of art. Centuries later, modern movements, while not concerned with accurate physical representation, would find other ways in which to immerse the beholder within the work.

The character of immersion is not static, and can differ in accordance to the art form, and within that, the particular style, genre, period, or movement. Obviously it is a different thing to be immersed within a Jackson Pollock painting than within a Da Vinci, a Vermeer, a Beethoven symphony, or a production of Hamlet. The one factor which links all of these disparate experiences is that the quality of immersion is significantly altered when filtered through a technological medium, be it a print in a book, a recording, or watching a video tape of a theatrical performance.

The Italian Futurists, for example, in the early twentieth century, glorified technology, giving formal expression to the dynamic energy and movement of mechanical processes. Their aesthetic credo can be summed up in their literary theory, in which a strong interest was expressed in “those methods which would blur the borderline between the dimensions to create a synaesthesia: by evoking all of the senses, the work would have a more profound impact.”<sup>12</sup> The German expressionist Wassily Kandinsky sought a similar concept within his paintings, aiming to stimulate multiple senses simultaneously. For example, Kandinsky believed that color, when applied in a certain manner and in certain combinations and compositions, could actually produce sound sensations that would resonate in the brain, producing an intensified emotive effect. His paintings were often referred to in musical terminology, such as Improvisation or Composition.

In the realm of music, composer Richard Wagner had a similar theory. Wagner’s life ambition was to create a “Gesamtkunstwerk,” literally, a total work of art, in which all art forms, including music, poetry, painting and drama, would be integrated into one complete synaesthetic experience. Just as Kandinsky sought to express music through color, Wagner aimed to evoke color through music. In fact, Wagner is often referred to as a “chromatic composer.”<sup>13</sup> By interweaving dramatic poetry with leitmotifs, or musical themes associated with particular characters, and a continuous underlying lyrical melody achieved through complex orchestration, in conjunction with deliberately intricate set design, Wagner created for his audience intense “sound pictures,” visually, aurally, and imaginatively stimulating. Wagner’s theory culminated in the building of his famous opera house in Bayreuth, which intended to elevate the experience of the viewer to a transcendental level, not unlike the effect of a religious pilgrimage, as in the Middle Ages.

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<sup>12</sup> <http://cadre.sjsu.edu>

<sup>13</sup> Charles K. Moss, M.M.Ed., M.Mus., “Wagner: Zenith of German Romanticism,” accessed from <http://www.classicalmus.hispeed.com/articles/wagner.html>

## B. Immersion: Electronic Media

As the explosion of electronic media in the late twentieth century greatly extended the accessibility to all of the arts; it also gave birth to a new trend of expanding, improving and refining the quality of access so as to achieve greater immersion. That is, less was now being required of the perceiver to “suspend one’s disbelief.” Technology was now taking over what heretofore had been the job of the imagination.

One of the earliest mergers of imagination and electronic media was that of radio where the “narrative” was external requiring the listener to create one’s own internal images. Movies and sound recordings all brought the perceiver to another space and time, but the perceiver was clearly aware of the media involved. Over the course of the 20<sup>th</sup> century these technological advancements enabled this media to do a better job of simulating reality through such developments as 3-D, hi fi, surround sound, digitalized sound, and stadium seating at movies. The most recent technological advances emerging are in the technology of Virtual Reality.

## C. Immersion: Virtual Reality

In many ways, the evolution of virtual reality technology can be understood to be rooted in the history of a commonplace activity now prevalent in most households with “children” of all ages: the video game. Though it began innocently enough, once it took hold, the videogame craze would change society in ways more profound than mere “mindless” entertainment for teenagers.

Videogames weren’t just iconic bits of plastic. They were more like music. They were a mental state.<sup>14</sup>

One of the earliest manifestations of what is currently known as the virtual experience is the video game. In her provocative book, *Joystick Nation*, cultural commentator J.C. Herz quotes an astounding statistic: that by the end of 1981, joy stick entertainment grossed more than the U.S. movie industry and Nevada gambling combined. Such a statistic reflects heavily on the state of leisure activity, and is a forerunning indicator of the extent to which the nation was becoming computer-reliant. The world of technology was no longer strictly the domain of facilitated communication, but of leisure and entertainment as well. Culture and the arts would not be far behind.

At this point the discussion of the impact of the technological revolution turns back to the focus of the monograph: the uniqueness of the live arts experience, especially its immediacy in terms of spatial and temporal proximity to the beholder. The act of actually “being there” provides the crucial environment in which the mental and physical

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<sup>14</sup> J.C. Herz, *Joystick Nation: How Videogames Ate Our Quarters, Won Our Hearts, And Rewired Our Minds*. (Boston: Little, Brown and Company, 1997) P. 65.

and emotional impact occurs. A continuum of innovations is taking place, and at each incremental stage, people are coming to rely more and more on the simulated as a substitute.

Definitions of what constitutes virtual reality are as contentious as its applications. In his book, The Metaphysics of Virtual Reality, Michael Heim cites what he sees as “seven divergent concepts currently guiding VR research” in an attempt to define the essence of Virtual Reality:

- 1) *Simulation*. This view of virtual reality connotes intensely detailed imaging systems in computer graphics in which “photo realistic real-time texture-mapped worlds,” are created. Its uses and applications include flight simulation, driving (auto) simulators, a host of video games.
- 2) *Interaction*. In this conception, VR is any electronic representation with which one can interact, from iconic digital symbols such as desktop trashcans to virtual universities where students attend and interact in a class on line.
- 3) *Artificiality*. This view holds that VR is *anything* artificial. It is broadly accepted that the opposite of “real” is “artificial.” This view would posit “artificial” and “virtual” as synonyms.
- 4) *Immersion*. This view of VR relies on the hardware necessary to transcend reality and create the illusion of being submerged in a virtual world. Therefore, VR is sensory immersion in a virtual environment.
- 5) *Telepresence*. Virtual reality means to be present somewhere remotely, as in telerobotic surgery. According to Jonathan Steur, “Telepresence” is the extent to which one feels present in the mediated environment, rather than in the immediate physical environment. This [mediated environment] can be either a temporally or spatially distant real environment or an animated but nonexistent virtual world synthesized by a computer.<sup>15</sup> One example of this is the control/operation of lunar or Mars landers by a technician on earth who is seated in a simulated vehicle, viewing and directing it through data supplied by remote sensors.
- 6) *Full-Body Immersion*. When the interaction between the human and the computer is able to take place without covering the body.
- 7) *Networked Communications*. In this view, a virtual world is a shared construct, much like the telephone. “Virtual worlds can evoke unprecedented ways of sharing....Because users can stipulate and shape objects and activities of a virtual

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<sup>15</sup> Jonathan Steur. “Defining Virtual Reality: Dimensions Determining Telepresence.” Journal of Communicatins 42.4 (1992), p. 76. Quoted in Ryan, “Immersion Vs. Interactivity.”

world, they can share imaginary things and events without using words or real-word references....”<sup>16</sup>

Virtual Reality has long been a staple in popular culture, thanks to the imaginative and technologically advanced minds of the science fiction community. From the Holodeck on the Starship Enterprise, to the fantasy vacations in Total Recall, to the more recent blockbuster The Matrix, the concept of experiencing computer-simulated worlds has mystified, intrigued, beguiled and fascinated. Who wouldn't want to experience the visceral excitement of exotic adventures, often an impossibility in the real world, without having to endure the inconveniences and/or dangers of actual travel, monetary concerns, with the added advantage of a minimal expenditure of energy? Just as the Internet is making worlds of knowledge available at a mouse click, Virtual Reality goes one step further.

What is lost in terms of the live arts experience is its immediacy in terms of spatial and temporal proximity to the beholder. As people come to rely more and more on the simulated in the so-called “real” world, it is not difficult to understand the logical progression into cyberspace, the computer-generated non-space.

Some Virtual Reality theorists argue that virtual experiences *can* generate emotions and perceptions that are just as valid as those experienced in the tangible world. As Marie-Laure Ryan, virtual reality theorist, points out, there is a plethora of contradictory opinions concerning the issue:

Some day VR will replace reality; VR will never replace reality; VR challenges the concept of reality; VR will enable us to rediscover and explore reality; VR is a safe substitute to drugs and sex; VR is pleasure without risk and therefore immoral; VR is addictive and will enslave us; VR is a radically new experience; VR is as old as Paleolithic art.<sup>17</sup>

Marie-Laure Ryan's assessment of the virtual experience focuses on two of Michael Heim's concepts 1) interaction, and 4) immersion. According to Ryan, in order for one to be truly immersed into something and apprehend it as truly “real,” one needs to feel surrounded by it, to be able to interact physically with it, and to have the power to modify the environment. The degree to which this can be achieved depends on two factors: the amount of data encoded within the transmission channel, and the number of sensory dimensions which are simultaneously being presented.<sup>18</sup>

One of the earliest art-related steps in this direction is the ability to tour museums through one's computer. It may not be long before these tours will immerse the “tourist” into a virtual world walk through of the museum and other art environments. It is left to the reader's imagination as to the ways the arts, virtual reality, and the Internet will one day

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<sup>16</sup> Michael Heim, “The Essence of VR,” from *The Metaphysics of Virtual Reality*. (New York: Oxford University Press, 1993.) <http://www.rochester.edu/college/FS/Publications/HeimEssence.html>

<sup>17</sup> Marie-Laure Ryan, *Immersion vs. Interactivity: Virtual Reality and Literary Theory*.

<sup>18</sup> Ryan, “Immersion vs. Interactivity...”

converge to produce the ultimate substitute of the Live Arts Experience, the Virtual Live Arts Experience.

### III. Implications of Mediated Art

The vast benefits that technology has brought to the arts had far overshadowed any negative ramifications *to date*.

#### A. Positive Contributions

It has only been in the past hundred or so years in the history of the arts that people have been able to capture live performances and reproduce them at a later date. Thousands of wax sound cylinders still remain dating from the 1880's. The subsequent invention of the phonograph, film, radio, television, tapes, cassettes, CD's, VCR's, CD ROM, etc. has enabled to the documentation and recording for posterity. In the case of the visual arts, the development of printing at a far earlier date enabled drawings and eventually paintings to be copied and reproduced. There now exist many possibilities for mediated cultural experiences, both in physical and electronic form.

#### 1. Increased Accessibility

Mediated art can provide cultural opportunities for those who are (1) physically disabled or (2) geographically unable (those who live in rural areas) or (3) choose not to attend (couch potatoes) *live* arts experiences. In the past, radio and television have been the primary vehicles for extending the reaches of the arts.

The idea of 'Live from Lincoln Center' is that the opera experience is being in the same room as someone that's singing. Television is a very different kind of thing from film. Television can take you there, to the place where that film or tape is originating. I wanted to use the product that Lincoln Center has—live performances—to take you there, from your living room. But it is still at a great remove. There's no way you can recreate an opera or a ballet on the television screen; all you can do is provide a kind of 'window' on an event that's happening somewhere else. It's nowhere near as good as being there, in most cases. *The reason for 'Live from Lincoln Center' is: if you can't go there, we're second best.* The kind of television that we do is supportive of the live performance activity, and is dependent on it entirely. If there wasn't an audience in the hall, we wouldn't have a television broadcast.<sup>19</sup>

**Dr. Ron Ruskin, psychiatrist:** When people in rural areas first hear opera on the CBC radio (Canada) they don't know what it is—they feel this emotional response, this feeling of connection to something. Even though they are isolated, there's something particularly about music which seems to reach people. It is the transformational experience of great music.

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<sup>19</sup> John Goberman, quoted in HAI's Hope and Inspiration Through the Arts, p. 15

## 2. Increased “mobility”: Access for Everyone to The Museum Without Walls

Today, the Internet offers accessibility options that previously had defied human imagination. Through the Internet the world has been transferred to one’s fingertips, where knowledge is but a mouse-click away. Whereas one may not be able to visit the Louvre, the Pantheon, Parthenon or the Pyramids of Giza in reality, it is now possible to virtually experience these magnificent cultural institutions.

High-resolution pictures on-line appear relatively grainy. Yet that drawback fades in light of the basic fact of the Internet's freedom from physical bounds. Andre Malraux once wrote that the revolution of photographic reproduction created a “museum without walls.” The Internet is the great flowering of that idea. Works of art from around the world, both originals and reproductions, have never been so easy to access—once you actually find what you're looking for.<sup>20</sup>

Because the computer and the camera have made available an incredible array of research sources, arcane problems can be explored as never before; scholars can deal with masses of data and remove collections of awe-inspiring completeness and diversity. This is one of the seductive miracles of the electronic age. Entire dissertations can be written without ever seeing the originals. Access is increasingly limited to the fragile drawings, documents and rare books that are primary sources....<sup>21</sup>

## 3. Increased Appreciation for the Real Thing

### a. Before the Event

Mediated art can provide information about and whet one’s appetite for the original work. In his book, The Road Ahead, Bill Gates discusses his creation of a global image data bank:

Although some of the images will be of artworks, that doesn't mean I believe that reproductions are as good as the originals. There's nothing like seeing the real work....Art, like most things, is more enjoyable when you know something about it....If multimedia reproductions make art more approachable, those who see the reproduction will want to see originals. Exposure to the reproductions is likely to increase rather than diminish reverence for real art and encourage more people to get out to museums and galleries.<sup>22</sup>

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<sup>20</sup> Steven Henry Madoff, “Art in Cyberspace: Can it exist without a Body?” The New York Times, 21 Jan., 1996: C1

<sup>21</sup> Ada Louise Huxtable, “Living With the Fake and Liking It,” The New York Times, March 30, 1997.

<sup>22</sup> Bill Gates, The Road Ahead. (New York: Viking, 1992) p. 225.

**Dr. J. Bharucha, professor of psychology:** If you go to an opera or you go to a symphony and you are already familiar with music from a CD, you're in a better position to first appreciate the nuance that the performer is trying to convey within the music itself. Secondly, you're in a much better position to take in the visual gestural information that the performers are providing. You've done your homework. It is a general principle in cognitive psychology that when you're familiar with certain kinds of context you are much better able to attend to the nuance. If you aren't, then some of the nuance is lost on you because the larger structure is also new.

**Liz Addison, museum marketing director:** I understand there is some evidence that people who are exposed to visual art through technology tend to spend more time with the work when they actually see it live because there's a certain degree of familiarity. They have had the opportunity to study it beforehand.

## **b. After the Event**

In addition to providing a foundation for increased enjoyment before the event, mediated art can also jog the memory, helping people to recall the original live arts experience.

**Alfred Leslie, painter and filmmaker:** All these [reproductions] serve to do is jog your memory of something that you once experienced. We know what fire is from having experienced it. When we look at a book and we've seen paintings, the reproductions in the book remind us of the paintings. But if you've never experienced the painting, you can't know it (by looking at its reproduction).

**Dr. Judith Balfe, sociologist:** Take the phenomenon of the (rock group) The Grateful Dead. In that there is a collectivity. The fact that people are plugged into their walkmen all the time, in one sense isolating themselves from the rest of the world, does not mean that they are alone. What they are doing through the music is being part of a community of other people who follow that same music. Whenever they get together...in rock clubs or arenas, there is something that is larger than life, than of any individual, being part of that live experience. What they're hearing on the walkman is just a simulacrum of that. They go to enough of the events to have both the live and the other.

Long after the real, live music has stopped, the memory lingers on...for days, months, sometimes years...in the case of those performances that are truly memorable. These memories, encoded and embedded in the brain, include information from all sensory inputs surrounding the events...from the preparation, to the travel, to the companionship of the people who went along; from sight to rich sounds; from the reactions of the audience, to whatever followed...all become associated with a rich sensory impact and memory.

**Dr. Frank Putnam, psychiatrist:** States of consciousness act as ways of encoding information. The brain encodes the state itself as well as the other information so that when you recall the other information, a lot of the state of consciousness physiology comes back.

These enjoyable emotions originally evoked can be aroused and re-experienced when the event is recalled long after the initial performance.

#### **4. Ability to Accentuate Subtleties of a Performance**

Mediated art can accentuate subtleties that might otherwise be missed in a live performance.

While record producer Tom Frost believes it is impossible to reproduce the “three-dimensional” sound quality of a live performance, he does believe reproductions have some intrinsic value.

**Tom Frost, record producer:** On a good recording, everything is balanced....It is more like sitting in the middle of an orchestra. It can be a valid experience if the recording is produced with the aim of bringing out the textures of the orchestration in a musical way that can be actually superior or clearer than what can be achieved in the concert hall....There are details in some of the intricate orchestrations that are never heard in the concert halls....That is the art of recording.

#### **5. Effectiveness as an Educational Tool**

As was previously noted, reproductions have a strong foundation within the discipline of art history, such as in the role of copying in the learning process for the student of fine arts. More often than not, the study of original art objects can be hindered by forces external to our control. For one, it may be impossible to visit the original due to distance, or the fact that the original is no longer extant (as is the case with many ancient and medieval studies). In the case of the art history student, reproductions are often the only medium through which to study a particular work. However, the process is fraught with problems. Study of the art object is often many times removed, thus creating a nebulous understanding of the original. Often the object is first viewed from a slide projected on a screen, which was transferred from a photograph. Thus artworks, especially sculpture and installation pieces, are rarely viewed in their intended three-dimensional states. It is often difficult enough to discern actual media when looking at a work projected on a screen or even in a book, or magazine. For example, a slide showing a classic Greek sculpture would in all probability be a Roman copy. The Romans made their copies in marble, whereas the original Greek works were sculpted in bronze. Nevertheless, the breadth and scope of accessibility to works of art which otherwise could never be experienced at all is unprecedented.

#### **B. Perceptual Limitations of Mediated Art**

A live arts experience includes a full range of visual and or aural stimuli from

the original source, not altered by some intermediate media. Mediated art, on the other hand, is an approximation, abstraction, or documentation of an art object (both visual and performing), sometimes enhanced and edited to give the illusion of perfection.

## 1. Reduction of Visual and Aural Stimuli

Electronically mediated art reduces the range of visual and aural stimuli, particularly scale and texture, which are available only with the original. Music experienced through radio and TV broadcasts, and through recordings such as CDs, cannot adequately capture the sound of a live arts experience. To make such a recording, technicians must squeeze the sound through microphones and mixers, and compress it.

**Mark Morris, choreographer/dancer:** People are shocked when they go to a concert hall and hear how quiet a string quartet is because they're used to hearing it at home, loud, or on a walkman.

**Tom Frost, record producer:** Nobody as yet has devised a sound system that creates the experience of being in a large concert hall or even a small concert hall. It is impossible. In the days of quadraphonic sound, when there were four speakers set up in a room, or now, with Dolby Surround Sound Systems...what seems to be really impossible is to simulate the feeling of a big space in a small space. The three-dimensionality of the sound or the feeling of being in a large space really cannot be satisfactorily reproduced in a living room. It varies, however, with the type of music. Certainly a solo piano, solo guitar, violin sonata or string quartet can sound quite realistic in a large-size living room with good acoustics and excellent equipment, but never an orchestra, because if you close your eyes your mind cannot visually imagine 100 musicians being in that room with you.

In reproductions of art in a book, the varying sizes of paintings have been reduced to fit a standard size page. Textures are lost. The original work now has as much emotional impact as viewing a vast panorama reduced to the size of a postage stamp.

Somebody was saying to Picasso that he ought to make pictures of things the way they are- objective pictures. He mumbled he wasn't quite sure what that would be. The person who was bullying him produced a photograph of his wife from his wallet and said, "There, you see, that is a picture of how she really is." Picasso looked at it and said, "She is rather small, isn't she? And flat?"<sup>23</sup>

**Jonathan Borofsky, sculptor:** Viewing of art through a reproduction such as a photograph is the difference between imagining your vacation and taking a vacation. It's never the same. We all picture what it's going to be like when we read the brochures. We have a vision of what the place is going to be. But it is never like that. It's thirty times better and it's much more real, it's holistically three-dimensional vs. a flat representation.

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<sup>23</sup> Gregory Bateson, quoted in Ray Kurzweil, The Age of Spiritual Machines: When Computers Exceed Human Intelligence. (New York: Viking, 1999) p. 159.

With crowds turning museums into pressure-cooker experiences, many people may wonder if they're not better off buying the CD-ROM and looking at Cezanne in the relative peace of their own homes. They better think again. Inveterate optimists imagine that we're near achieving instant access to the masterpieces in the museums. But the difference between a work of art and a reproduction is absolute. The computer screen, with its points of light, captures some of the feel of brilliantly colored paintings by Rubens or Monet, but it turns a Rembrandt into a black hole and the matte surface of a fresco into shiny plastic. There's irrefutable logic to reproducing paint on canvas with printer's ink on paper; the materiality of the original is respected.<sup>24</sup>

**Alfred Leslie, painter and filmmaker:** A person's physical size is important to their idea of what is real to them; they have no way of telling unless they're confronted with what's there. One needs the reality of going into a place where you can actually see a work and understand the actual size of a sculpture.

Mediated art reduces three dimensional live art experiences to two dimensions (except in the case of photography, videography, film, etc., which are inherently two-dimensional). Viewing a photograph of a sculpture or viewing a performing art event through a television, whether by videotape or live broadcast, is experiencing the art through one eye- the camera. This includes, in the performing arts, people, sets, costumes, pageantry, choreography, etc. The three dimensional depth has been replaced by a two dimensional rectangle; this is equivalent to seeing the sculpture or the event through one eye.

**Naj Wikoff, artist/arts administrator:** I think in terms of visual art, painting, or a real object versus a reproduction, is its three dimensionality, it's a sense of texture, it's a sense of reality. You can see the strokes of the effort that really went into making something. That adds an additional sense of warmth, of human contact.

**Mark Morris, choreographer/dancer:** When viewing the...television a person is experiencing one version of it or a group of people's point of view. It is the director and editor who decide what point of view to take. In the theater the viewer is free to look over the entire space and choose whatever draws your eye. You get to choose; in the TV version you can't. So (in TV) we choose what to accent in scenes to get the story across. We make choices for the single viewer at home watching a videotape; we make choices that would be made by each individual in an audience. There are many, many more choices in viewing personally a live show.

**Sherrill Milnes, baritone:** Opera is something that you can't get on a television screen at home. No matter how big a screen your television has, the performance is limited by its size and flatness; the viewing is selected for you; no matter how great the lenses are, it's not as good as the human eye. The human eye can focus on something and still see the perimeter sixty feet away.

## 2. Impersonal Quality of Mediated Art

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<sup>24</sup> Jed Perl, "Is it Real or is it Megabytes?" The New York Times, 1 June, 1996: A19.

Viewing of or listening to a broadcast or record at home means relating to an inanimate object.

**Kavi Alexander, record producer:** If a human being is sitting in front of you and playing the violin you are interacting with a living entity on a psychological and physical and emotional level, whereas when you are listening to a recording you are sitting between two inanimate loud speakers.

**Richard Brown, film critic:** Television is not just a medium of communication—it's a piece of furniture in your bedroom and your living room. You're looking at a piece of furniture. And you're doing it alone or with one or two people.

**Dr. Stanley Greben, psychiatrist:** The live (performing) arts experience exercises more of the listener or viewer than any reproduction can, because it is a spontaneous human, authentic presentation, not a mechanical reproduction. Let's look at another model to try to shed some light. There is a computer program called “Eliza” that is the equivalent of a psychotherapist. If you say to the computer, “I really felt so upset by that dream,” the computer would say something like “What does that bring to your mind?” If you read transcripts of those conversations, the computer program is pretty good, and it can be helpful. But if a human engages in the same dialogue and even says some of the same words, there is an additional dimension because it is a real, immediate, ongoing, personal, intimate relationship—it's not programmed. Eliza is the most distant way to be a psychotherapist—the most intimate way is one person sitting in a chair looking at another person sitting in a chair, and discussing things back and forth. There is an intermediate way (and most people don't like it) where the therapist is just like a computer and only says, “Uh-huh.” Then there is no spontaneity to it. Then the patient or client will say, “It doesn't work...it is like talking to a mirror.” A human doing it by the book is not like a human who is free. It is similar to a performance that is mechanical...in real life, or literally through a reproduction.

**Bill T. Jones, choreographer/dancer:** Television is a document; it's not the real thing; it's like reading a description of the event. You would like to know what it was like to see that person leap and be caught by another person live.

In modern times especially, mediated arts have come to saturate our daily lives, essentially becoming part of the background.

Music is unavoidable....Music bombards our ears in advertising jingles, popular hits, round-the-clock music stations. It spills out of concealed speakers in elevators and on trains, in airports and shopping malls. We do not need to search for music; it seeks us and finds us out.<sup>25</sup>

Some people argue that technological advances have greatly improved the quality of life by making music so easily available. Transistor radios, laser disks, tape recorders, tape decks blare the latest music twenty-four hours a day in crystal-clear recordings. This continuous access to good music is supposed to make our lives much richer. But this kind

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<sup>25</sup> Daniel Goleman, Emotional Intelligence. (New York: Bantam Books, 1995) p. 82.

of argument suffers from the usual confusion between behavior and experience. Listening to recorded music for days on end may or may not be more enjoyable than hearing an hour-long live concert that one had been looking forward to for weeks. It is not the hearing that improves life, it is the listening. We hear Muzak, but we rarely listen to it.<sup>26</sup>

### 3. Repetitious Quality of Mediated Art

Extended exposure to reproductions could leave one bored and eventually encourage people to seek out the “real thing.”

**Schuyler G. Chapin, Commissioner, New York City Dept. of Cultural**

**Affairs:** At the moment people are fascinated and absorbed by mechanical gizmos; soon they're going to find themselves fed up, bored by the ability to push a button and get everything. They'll come back to live performances. You have to think historically about these matters. When the phonograph was invented people began to be afraid that phonograph records would take the place of performances. The performance side of family life in those days, when the phonograph was new, was the piano, because that was the instrument that was sort of *comme il faut* for everybody to have. Music was live; people sat around the piano and often joined in family singing. This was interrupted by the phonograph, which in its way was like the present surfeit of electronic gadgetry. After the phonograph came both radio and sound movies, two new diversions particularly important during the depression when there frequently was no family money to attend concerts or the theatre. Of course we've been hearing from beginning of this century how the theatre is dead, dying, we've been going to the funeral for years. The simple fact is that people continue—and will continue—to respond to live performances. Mechanical reproduction eventually wearies them and they seek, and continue to be stirred by performances onstage. They always will.

### 4. Absence of Audience

One of the most basic limitations to a mediated art experience is the absence of the audience in a venue dedicated to the art. Both impact upon the perceiver of art to frame and intensify the experience. The casualness of the “at home” experience combined with the watering down of the stimuli turns this coach potato experience into a bland non-memorable event.

### 5. Blurring Distinctions Between Real and Fake

In his groundbreaking essay, “Art in the Age of Mechanical Reproduction,” Walter Benjamin writes extensively on the proliferation of reproductions in the early 20<sup>th</sup> century and, most importantly, on the effect that this has had on what he termed the “aura” of the original work of art. Benjamin maintains that “even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence

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<sup>26</sup> Mihaly Csikszentmihalyi. *Flow: The Psychology of Optimal Experience*. (New York: Harper & Row, 1990) p. 109.

at the place where it happens to be.”<sup>27</sup> As Benjamin writes, “that which withers in the age of mechanical reproduction is the aura of the work of art.”<sup>28</sup> In Benjamin’s view, increased technological ability has led society to a state in which culture is removed from its original and intended setting, thus altering the experience for the beholder. Benjamin sees the process by which the reproduction manifests itself within society as a “tremendous shattering of tradition which is the obverse of the contemporary crisis and renewal of mankind.”<sup>29</sup>

Ada Louise Huxtable concurs, writing that even in the highbrow intellectually-charged world of art and scholarship, where distinction would seem to be a cultivated ability,

...there is a growing interdependence of the real and the fake, with a disturbing identification of the values of the original and the copy. The slippage is taking place at institutional and cultural sources that have always been the defenders and keepers of authenticity....<sup>30</sup>

Huxtable goes so far to say that

High art has been “contaminated...” by the “blurring of boundaries” of original and reproduction. It is common practice for originals, reconstructions and reproductions to be mingled in an effort to bring museum displays “to life”; one must read the exhibition labels to know what is real and what is not....<sup>31</sup>

When differences between “real” and “copy” are no longer easily discernable, the question of why one is “better” or more beneficial than the other becomes imminent. If one cannot tell the difference between what is real and what is fake, would not the quality of immersion be the same for each?

Many would say no. For Huxtable,

...the loss of direct contact is incalculable. It is through the immediate visual and sensory response engendered by repeated exposure to the actual work of art that connoisseurship is created—the related sequence of close knowledge and informed taste by which works of art can be accurately understood, compared, defined, judged and enjoyed. There is no replacement for this primary experience- the direct connection with the hand of the artist in the actual touch of the pen or the stroke of brush- no matter how technically perfect the reproduction.<sup>32</sup>

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<sup>27</sup> Walter Benjamin, “Art in the Age of Mechanical Reproduction,” from the web page [http://pixels.filmtv.ucla.edu/community/julian\\_scaff/benjamin/benjamin1.html](http://pixels.filmtv.ucla.edu/community/julian_scaff/benjamin/benjamin1.html).

<sup>28</sup> Hillel Schwartz, The Culture of the Copy: Striking Likenesses, Unreasonable Facsimiles. (New York: Zone Books, 1996) p. 373.

<sup>29</sup> Schwartz, The Culture of the Copy, p. 373.

<sup>30</sup> Ada Louise Huxtable, “Living With the Fake and Liking It,” The New York Times. March 30, 1997.

<sup>31</sup> Huxtable, “Living With the Fake and Liking It.”

<sup>32</sup> Huxtable, “Living With the Fake and Liking It.”

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**Having reviewed the significance of the live art experience and the ramifications of it being blanded by media, attention now turns to its impact on health and wellness and the grave implications of mediated cultural experiences.**

# **Part Three: Health, Wellness, and the Live Arts Experience**

## **I. Definitions of Health and Wellness**

## **II. Mind/Body Connection**

- A. Many Minds; One Body**
- B. Impact of Expectancy - The Will To Live**
- C. Placebo Effect**
- D. Hypnosis**

## **III. Role of the Emotions**

- A. Emotions and the Immune System**
- B. Emotions and Art**
- C. Emotions and the Live Arts Experience**

## **IV. Live Arts Experience and...**

- A. Optimism, Pleasure, Relaxation**
- B. Coping, Stimulation, and Wellness**
- C. Hope and Inspiration**
- D. Isolation and Mortality vs. Social Engagement, Intimacy, and Longevity**
  - 1. Isolation and Mortality**
  - 2. Information Technology and Isolation**
  - 3. Social Engagement and the Live Arts Experience**
  - 4. Intimacy through the Live Arts Experience**
  - 5. Longevity through the Live Arts Experience**

# I. Definitions of Health and Wellness

It is useful to properly explore art's effects on health, some general definitions of health and wellness, from the perspective of both traditional western medicine and the growing field of “alternative” medicine.

Health is a state of complete physical, mental, and social well-being and is not merely the absence of disease and infirmity. Illness is a negative state, and wellness is a positive state, a long term process, the two located at opposite ends of the health continuum.<sup>33</sup>

To those ancient Greeks who were dedicated to the goddess Hygeia, daughter of Asklepios, healing came from within; its function was to make someone whole again, “restoring integrity and balance.”<sup>34</sup>

For the worshippers of Hygeia, health is the natural order of things, a positive attribute to which men are entitled if they govern their lives wisely. According to them, the most important function of medicine is to discover and teach the natural laws which will ensure a man a healthy mind in a healthy body.<sup>35</sup>

To the Hygeians, the function of medicine was to discover natural laws for healing the mind and body. This approach is somewhat akin to Chinese medicine, whose goal is to increase internal resistance to disease, to act with the body's defenses, not against germs.<sup>36</sup>

The Hygeian concern for balance or order is the origin of the term hygiene, which implies “a system of principles for the preservation of health and prevention of disease,” in addition to sanitary practices or cleanliness. These ancient concepts give rise in our time to alternative and complementary medicine, a term loosely applied to describe diverse forms of healing that do not fall within traditional or orthodox Western medicine. It is a field that has been growing exponentially in recent years due to, in part, increasing recognition and widespread usage. A related concept is holistic medicine.

The term ‘holistic’ was coined by philosophers in the 20<sup>th</sup> century. However, the idea it expresses—the whole is greater than the sum of its parts—is an ancient one. As applied to well-being in humans, the teachings of Pythagoras and Hippocrates, the Indian Ayurveda and many other ancient healing systems that assert true health is only attained when body, mind, emotions, and spirit are in proper balance. The integration of the

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<sup>33</sup> World Health Organization, WHO Basic Documents. 40<sup>th</sup> ed. (Geneva, 1994) and Steve Suter, Health Psychophysiology: Mind-Body Interactions in Wellness and Illness. (Hillsdale: Lawrence Erlbaum Associates, 1986) p. 273.

<sup>34</sup> Andrew Weil, Spontaneous Healing (Boston: Houghton Mifflin, 1988) p. 6.

<sup>35</sup> Dubos, cited in Weil, Spontaneous Healing, p. 4.

<sup>36</sup> Weil, Spontaneous Healing, pp. 4-5.

holistic/mind-body view in health care has promoted an acceptance of the view of psychological factors in physical disease.<sup>37</sup>

**Dr. Richard Lippin, CMO, EarthMed.com:** Holistic medicine is helping patients—whether as a family doctor, a surgeon, a cancer specialist, a psychiatrist—to become themselves, to figure out who they are and become that.

Dr. Steve Suter, has defined wellness in the following manner:

The burgeoning world-wide wellness movement articulates a core belief that each of us has a fundamental universal desire and capacity toward progress and toward constantly improving our states of physical, mental, emotional and spiritual health and well-being or wellness.<sup>38</sup>

As a long-term process, wellness is characterized physiologically, by resistance to disease with optimum functioning of the immune system; psychologically, by a potential for growth or self-actualization, and an overall sense of subjective well-being or satisfaction with life; and behaviorally, by a feeling of competency or self-efficacy.<sup>39</sup>

In an interview, ten years since his initial publication, Dr. Suter indicated he has been rethinking the concept of wellness:

**Dr. Steve Suter, professor of psychology:** I believe there is an essential element of wellness that involves action; I didn't emphasize that as much as I would now; behaving, taking action, acting on the world. What got me going in this direction was actually the idea of happiness. There is plenty of evidence that happiness, a feeling of satisfaction in one's life, contributes to longevity and health, helps combat illness. All seemed to fit together nicely and then research started coming out. It was mainly from an institutional setting that found that cantankerous old guys in some of these settings tended to have the most longevity. These were not blissful happy individuals. What unites the “happy result” and the “cantankerous result” is that we're talking about action. I think people who are cantankerous in the institutional setting are the ones that, for example, lead the revolt against the food saying “this food is slop!”—they're not passive. In the three-part model of wellness—psychological/behavioral/biological—the psychological element is growth, the unfolding or potential or self-actualization. In order to become motivated to pursue it, you have to have extra psychological resources beyond those that are needed for survival. You're not just concerned with getting enough to eat or feeling safe, but you're reaching out for stimulation. You're seeking growth. They are not just sitting in a room, not just hitting the button on the remote and having something on television. It requires action to go to a concert, to interact with the live arts.

## II. Mind/Body Connection

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<sup>37</sup> [www.unex.berkeley.edu](http://www.unex.berkeley.edu)

<sup>38</sup> Suter, *Health Psychophysiology*..., p. 273.

<sup>39</sup> Suter, *Health Psychophysiology*..., p. 273.

This monograph postulates the significant impact on health and wellness through the enjoyment of live art experiences. Several linkages need to be established for this to be demonstrated: 1) that the “mind,” here stated as mind and emotions, can significantly impact on the body and 2) that the enjoyment of the arts, through the mind and emotions, can have a significant impact on the body, particularly its health and wellness. We will first explore the interconnection between mind and body, and then, the positive ramifications of live arts experiences on the mind/emotions and through them, on the body. Finally, we will look at what all this means on one most basic measure of health and wellness: the subject of mortality and longevity.

## A. Many Minds; One Body

One dramatic example of the mind/ body connection is the phenomenon of Multiple Personality Disorder (MPD), or dissociative states.

The first patient I encountered with multiple personalities would go through certain medical tests in one personality, because as that person she would experience no pain, fear, or difficulties from the procedures. When the tests were over she would shift back to her dominant personality. Physiologically speaking, however, the differences among the personalities in a multiple can be much more startling than that. There are certain physiological traits that we assume to be fixed, like diabetes, left-or right-handedness, allergies or color-blindness. It appears however, that people with MPD may be allergic to cats or orange juice in one personality but not in another, may exhibit burns in one personality but not another, may show drug sensitivities in one personality but not another, may switch from being right-handed to being left-handed. I knew someone who had to keep half a dozen pairs of glasses in her bedside stand, because she didn't know who she would be when she woke up. What makes the study of multiple personality of general interest is that it reveals the possibility of changing your body by changing your personality.<sup>40</sup>

The concept of MPDs is a subject of debate. To some, such as Dr. Frank Putnam, Chief of the Unit on Developmental Traumatology of the National Institute of Mental Health, MPD is a “complex, childhood-onset, posttraumatic dissociative disorder.” To others, such as Dr. Paul McHugh, Director of Department of Psychiatry at Johns Hopkins University School of Medicine, MPD “is a form of hysteria induced by therapists by asking patients about alter personalities.” This monograph need not enter the debate. **Whether the individual has a dissociative disorder or is suffering from induced hysteria, the individual believes her or himself to be another person, and the mind/body connection functions in dramatically different ways for each personality.**

The concern for this monograph is not the origins of the phenomena observed, but that the mind (or several minds) can produce such profound physiological changes. This phenomenon underscores the depth and extent to which mental processes that comprise a

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<sup>40</sup> Bernie Siegel. *Peace, Love & Healing: Bodymind Communication & the Path to Self-Healing; An Exploration.* (New York: Harper Collins, 1989) pp. 21-22.

personality—memories, attitudes, beliefs, feelings—can influence biological systems, e.g. vision, allergies, handedness...all presumed to be remote from changing mental/emotional states. It means that our bodies are “hardwired” through a mind/body connection such that different mental/emotional states that comprise “the mind” can have a far greater impact on “the body” than has been understood.

**Dr. Frank Putnam, M.D., National Institute of Mental Health:** The potential of the biological system is much greater than believed. Using a computer circuitry metaphor, it depends on what program is running the circuits. The different states of consciousness tap the hardware differently. By changing the state of consciousness, you see a much wider range of possibilities than current physiology [theory] can support.

## **B. Impact of Expectancy – The Will To Live**

Another example of the mind/body connection is the ability of a terminally ill person to postpone her/his death when s/he wants to live to a certain significant date, be it a birthday, an anniversary, or even a millennium. A stunning statistic suggesting a validation of this will to live emerged in New York City where health officials reported a 50% increase in the number of deaths in the first week of January '00 over the same period a year ago. That is, in the first week of 2000, 1791 deaths were reported in contrast to the 1187 deaths that were reported in the same period in '99. The tentative conclusion is that people hung on to live into the millennium. Alternatively, perhaps it is possible for one to die before witnessing an unbearable event. Consider this scenario: The cartoonist Charles Shulz died of cancer on the eve prior to the final installment of his Charlie Brown strip...as if he could not face the day knowing that he would be looking at his last cartoon.

Sherrill Milnes told of one such touching tale about the time he performed in Tivoli Gardens in Copenhagen.

**Sherrill Milnes, baritone:** I did a concert; afterwards people were coming up backstage for photos. There was a small woman that looked very pale, very unhealthy, weak, harried, very thin. I immediately thought of chemotherapy, and that's what it turned out to be. At any rate she was next and very dutifully stood up; she was very little, and there was some rush of emotions as she stepped up to me and put her arms around me and just started to sob, uncontrollably and no words had yet passed, nothing had been said yet. She kind of mumbled an apology and said that she was just out of the hospital, she had been a fan of mine, she was afraid she wouldn't get out in time, she wasn't cured at all, she didn't know what her future was in terms of life or death, she was not well. She wanted to attend that concert, it would be the first concert she had heard in years, and through these words just sobbing, her body just wracked, crying. At some point she extracted herself from me, thanked me for my art and that concert in particular and for my art in general. If she were going to die, she very much wanted to attend that concert.

## C. Placebo Effect

The placebo is the chemistry of the will to live or an emissary between the will to live and the body. It is doubtful whether the placebo—or any drug for that matter—would get very far without a patient's robust will to live, for the will to live is a window on the future. It opens the individual to such help as the outside world has to offer, and it connects that help to the body's own capability for fighting disease. It enables the human body to make the most of itself. What we see ultimately is that the placebo isn't really necessary, and that the mind can carry out its difficult and wondrous missions unprompted by little pills. The placebo is the proof that there is no real separation between mind and body. The fact that a placebo will have no physiological effect if the patient knows it is a placebo only confirms something about the capacity of the human body to transform hope into tangible and essential biochemical change. Creativity, the will to live, hope, faith, and love, have biochemical significance and contribute strongly to healing and to well-being.<sup>41</sup>

In a recent article in *The New York Times*, author Sandra Blakeslee states:

But now scientists, as they learn that the placebo effect is even more powerful than anyone had been able to demonstrate, are also beginning to discover the biological mechanisms that cause it to achieve results that border on the miraculous. Using new techniques of brain imagery, they are uncovering a host of biological mechanisms that can turn a thought, belief or desire into an agent of change in cells, tissues and organs.<sup>42</sup>

Blakeslee goes on to write that

Explanations of why placebos work can be found in a new field of cognitive neuropsychology called expectancy theory- what the brain believes above the immediate future....Support for the expectancy theory emerged about 10 years ago, when many scientists realized how closely the brain, the immune system and the hormone production of the endocrine system are linked. Chronic stress sets into motion a cascade of biological events involving scores of chemicals in the body- serotonin, cortisol, cytokines, interleukins, tumor necrosis factor and so on.

Such stress lowers the resistance to disease and alters gene expression. When people are under stress, wounds tend to heal more slowly, latent viruses like herpes erupt and brain cells involved in memory formation die off....

But what about the opposite? Can a thought or belief produce a chemical cascade that leads to healing and wellness? Researchers studying placebos think the answer is yes, and they offer several ways it might work:

- A placebo might reduce stress, allowing the body to regain some natural, optimum level called health.

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<sup>41</sup> Norman Cousins, *Anatomy of an Illness as Perceived by the Patient*. (New York: Norton, 1979) pp. 56-69

<sup>42</sup> Sandra Blakeslee, "Placebos Prove So Powerful Even Experts Are Surprised: New Studies Explore the Brain's Triumph Over Reality" *The New York Times*, October 13, 1998.

- Special molecules may exist that help carry out placebo responses. For example, stressed animals can produce a valium-like substance in their brains, but only if they have a recent study found that some control over the source of the stress. People almost certainly have similar brain chemistry.
- Placebos may draw their power from the way the brain is organized to act on what experience predicts will happen next.

‘We are misled by dualism or the idea that the mind and body are separate,’ said Dr. Howard Fields, a neuroscientist at the University of California at San Francisco who studies placebo effects. ‘A thought is a set of neurons firing which, through complete brain wiring, can activate emotional centers, pain pathways, memories, the autonomic nervous system and other parts of the nervous system involved in producing physical sensations,’ he said.<sup>43</sup>

The placebo is a concept not readily accepted by all. Gunver Sophia Kienle and Helmut Kiene analyzed 800 studies reporting the placebo effect only to conclude, “In our opinion, one must ask whether the existence of the so-called placebo effect—‘the lie that heals,’ therapy through deceit—is largely, if not entirely, an illusion.... Our real task is to continue exploring effects that we do not understand.”<sup>44</sup>

Spontaneous improvement, fluctuation of symptoms, regression to the mean, additional treatment, conditional switching of placebo treatment, scaling bias, irrelevant response variables, answers of politeness, experimental subordination, conditioned answers, neurotic or psychotic misjudgment, psychosomatic phenomena, misquotation, etc. These factors are still prevalent in modern placebo literature. The placebo topic seems to invite sloppy methodological thinking.

The truth is that the placebo effect is counterfeited by a variety of factors including the natural history of the disease, regression to the mean, concomitant treatments, obliging reports, experimental subordination, severe methodological defects in the studies, misquotations, etc; even, on occasion, by the fact that the supposed placebo is actually not a placebo, but has to be acknowledged as having a specific action on the condition for which it is being given.<sup>45</sup>

As with the earlier discussion of people diagnosed with multiple personality disorders, it is beyond the scope of this monograph to take sides on the existence or veracity of the placebo effect. Again, as with the controversy on MPDs, the point here is to underscore the ability of the mind and emotions to alter physiological functions in ways not readily explainable.

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<sup>43</sup> Sandra Blakeslee, “Placebos Prove So Powerful Even Experts Are Surprised: New Studies Explore the Brain’s Triumph Over Reality.” *The New York Times*, October 13, 1998.

<sup>44</sup> Kienle, Gunver Sophia and Kiene, Helmut. “Placebo Effect and Placebo Concept: A Critical Methodological and Conceptual Analysis of Reports on the Magnitude of the Placebo Effect.” *Alternative Therapies in Health and Medicine* 2.6 (1996) 39-54

<sup>45</sup> Kienle and Kiene. “Placebo Effect and Placebo Concept...”

## D. Hypnosis

Certain people can be hypnotized by others, and certain people have an additional ability to hypnotize themselves by achieving a certain trance state. Despite the mode of accomplishment, often the hypnotized person has the ability to alter her/his physiology, for example, by not experiencing pain. This has been dramatically demonstrated in a wide range of varied experiences, from yogic trance states to painless surgery performed without anesthesia.

**These are but four varieties of human experience that demonstrate the ability of a person to dramatically alter her/his corporeality in certain mental/emotional state. It is through the hard wiring of the body that mental and emotional states, particularly those created by live art experiences, impact upon one's health, wellness, and longevity itself.**

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## III. Role of the Emotions

Theories about the arts in relation to health, healing, the mind/body connection and wellness create the platform on which the monograph proceeds. Fundamental to the discussion is the role of emotions, and the health benefits which can be derived from their expression.

From a medical standpoint, Dr. Roger Dafter writes that

Emotions are a source of connection between mind and body as well as a stimulus to action. Emotions provide information to people about their physical, existential, spiritual, psychological, and social states-of-being. Emotions, in and of themselves, are neither positive nor negative, but rather innate psychobiological signals that serve as sources of information for the (psychologically aware) individual.<sup>46</sup>

In a subsequent interview with HAI:

**Dr. Roger Dafter, psychiatrist:** Emotional expression is both the subjective inner experience the person has; the psychological response, as well as any kind of outward verbal, social expression. The expression of emotion takes place through all those channels. When an emotion isn't expressed, it's suppressed or repressed.

To some, the benefit of an art experience is the mere fact that it generates an emotion, any emotion. The absence or stagnancy of emotion has been viewed as a health hazard.

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<sup>46</sup> Roger E. Dafter, "Why 'Negative' Emotions Can Sometimes Be Positive: The Spectrum Model of Emotions and Their Role in Mind-Body Healing." *Advances: The Journal of Mind-Body Health*, 1996: 12.2.

Chinese medical theory postulates that a primary cause of disease is the “nontransformation of emotion.” Acupuncturists believe that in a healthy person, it is the nature of emotions to change, to transform one into another, to move from organ to organ through the body. According to the theory, when this movement of energy is blocked, illness is thought to ensue. The aim of Chinese medical practice is to eliminate blockages and once more foster the free flow of energy.<sup>47</sup>

It follows, therefore, that stimulating the emotions is beneficial to health.

**Dr. Nicholas Hall, psychoimmunologist:** We all need a balance of the emotions with an emphasis on a certain amount of excitement. If a person is spending a huge amount of energy all day, they are quite likely to become burnt out as a result. But the opposite scenario can also occur: a person who works at a very boring, tedious job can also suffer burn-out as a result of too little energy expenditure. We need a certain amount of emotional excitement in our lives to counterbalance the boredom. At the same time, we need a certain amount of tranquility to prevent the emotional excitement from crossing into the realm of anxiety. The role of the arts is to enable people to create those changes in mood. I think that music, especially, is an instrumental message; it's a means by which a person can create the balance they need, except for some people who have a very high threshold and have to jump off ledges with bungee cords around their ankles, or take up sky diving.

## A. Emotions and the Immune System

One of the biological systems in which mind/ emotions and body connect is the immune system. For example, it is within most people's experience that they are most susceptible to colds/flu when feeling “run down.”

With the current devastating epidemic of HIV/AIDS, and the immune suppressive effect of chemotherapy, the subject of impaired immunity has moved to the foreground of healthcare and research. The study of the linkages between mental and emotional processes on the body, primarily the immune function, starts with the discipline of psychoneuroimmunology, (PNI).

The immune system is highly complex and is designed to defend our bodies against foreign invaders such as bacteria, viruses, and noxious chemicals and also to act a surveillance system pinpointing and then killing any mutant cells that could develop into cancer.<sup>48</sup>

For most people, the most common introduction to PNI comes when they recognize that they are more susceptible to illness, like the common cold, when their immunity is suppressed, most often due to stress. Various meditative or mindfulness techniques exist

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<sup>47</sup> Marc Ian Barasch, The Healing Path. (New York: G.P. Putnam's Sons, 1994) p. 307.

<sup>48</sup> George F. Solomon, “Emotions, Stress, and Immunity” in Robert Ornstein and David Sobel, The Healing Brain. (New York: Simon and Schuster, 1987) Chapt. 15, p. 174.

that can systematically and intentionally induce a degree of relaxation that can have a measurable impact on various elements of the immune system.

To the extent that enjoyment of the arts can bring relaxation, catharsis, and reduction of stress, they are creating the climate if not weather for enhanced immunity.

To Dr. Richard Lippin, the immune system is but one part of our physiology that benefits from enjoyment of the arts:

**Dr. Richard Lippin, CMO, EarthMed.com:** There's a whole range of responses and emotions that pleasurable art can induce, which include joy, weeping, laughing—Thank goodness the physiology of laughter, the physiology of weeping, the physiology of a smile; all are finally being studied in medicine. They all have physiological correlates that in my opinion go above and beyond just the immune system. I think the immune system is a fundamental system but I'm also interested in what happens to the cardiovascular system, the brain, the lungs—for example, most people go through life hyperventilating because we're living in the age of anxiety. So I think the immune system is overplayed—I think it's important but people tend to correlate wellness with psychoneuroimmunology wholly; it's a very important piece but only a part of it. Besides relaxation, increased interpersonal communication can improve one's health and well-being. There is now a substantial body of evidence that indicates the extent to which social relationships are strong and supportive is related to the health of individuals who live within such social context; the extent to which people maintain close personal relationships with others. Studies have examined the dynamics of social integration and social support and postulated an array of variables which help describe the relation of a person to the type of support needed and how it is provided.

## B. Emotions and Art

The following theories of art link the aesthetic impact to psychological and physiological functioning of the body:

**Psychoanalytic Theory of Art:** The source of pleasure experienced by the art perceiver is based on the assumption that in every adult person there exist drives and wishes which, owing to fixation and repression, have remained partly infantile or primitive and whose satisfaction is barred either through social rules and standards or through the norms that are internalized in the personal superego. The perception of works of art afford vicarious fantasy gratification for these unsatisfied wishes in a sublimated, socially accepted form.<sup>49</sup>

**Communication Theory of Art:** Proposes that art serves to objectify human feeling so that people can contemplate and understand the world of inner experience, making a distinction between discursive symbols (those used outside of the arts, such as literal language and numbers) and presentational symbols (those used in the arts). Langer argued that only the presentational kind can describe inner reality. The world of feeling is incommensurate with nonartistic, discursive symbols. Presentational symbols, on the

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<sup>49</sup> Hans Kreidler and Shulamit, Psychology of the Arts (Durham: Duke University Press, 1972) pp. 6-7.

contrary, are able to mirror the structure of feeling. Art thus becomes the only way that people understand and reflect upon feeling. Because of this, art yields insight into the mind...art enables people to understand the world of feeling.<sup>50</sup>

**Arousal Theory of Art:** Art elicits pleasure by acting on arousal, that is, on a person's level of attention, alertness, or excitement. Art affects arousal through three different properties. First, its psychophysical properties, such as brightness, saturation, size, loudness, or pitch. The second is through its ecological properties, its association with experiences recognized as helpful or harmful to survival, such as food, war, sex, or death. The third is through the "collative" variables, such as arousal heightening devices as novelty, or the newness of the elements; surprise, or the frustration of expectations; and complexity, or the heterogeneity, irregularity, and asymmetry of the elements. These elements are called "collative" because, in order to determine the novelty, surprise, or complexity inherent in a pattern, the perceiver must compare; or collate, information from more than one source.<sup>51</sup>

**Tension Reduction Theory of Art:** A major aspect of the art experience consists in the arousal and relief of tension in the spectator by the work of art. The work of art is capable of producing tensions, which on the one hand are sufficiently variegated and multidimensional to enable the evoked tensions to absorb and combine with more and less diffuse residual tensions in the spectator; on the other hand, these tensions are specific enough to be resolved through some other aspect of the art input. Thus, the resolution of the specific tensions implies relief also for the diffuse tension with which they have combined. The resolution of these tensions is attended by pleasure.<sup>52</sup>

## C. Emotions and the Live Arts Experience

An aesthetic experience generates emotions so subtle they often defy verbal description. They fall within a range extending from joy to despair, from inspiration to depression, all within an aesthetic context structured and limited by the time spent with the particular work of art. These art-generated emotions are transient by nature, but they have a long-term effect. Experiencing them broadens our emotional vocabulary, and gives us new perspectives on the nature of things.

The support group demonstrates one of the most common and basic examples of emotional reinforcement.

New experimental mind-body treatments which help patients work with the entire range of their emotions as part of the healing process, have prolonged life in cancer patients. In a well-controlled study, Dr. David Spiegel et al. (1989) found that participation in a cancer support group doubled the life expectancy of metastatic breast cancer patients. Spiegel emphasized that there was no association between positive emotions and survival

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<sup>50</sup> Ellen Winner, *Invented Worlds* (Cambridge, MA: Harvard University Press, 1982) p. 66.

<sup>51</sup> Winner, *Invented Worlds*, pp. 58-59

<sup>52</sup> Kreidler, *Psychology of the Arts*, p. 22.

time. He has speculated that the healing ingredients in the group were social support and the feeling of connectedness. To repeat an earliest point, perhaps the group support enabled people to use the information contained in all of their emotions, including their seemingly negative feelings, to identify their core values and concerns, which in turn would facilitate the mobilization of personal and social resources to realize these values.<sup>53</sup>

The most salient feature of a live arts experience is the presence of an audience, which results in a sharing and intensification of emotions as well as a sense of connectedness, both with the audience and with the art. Music, dance, and art originated as ceremonies or rituals relating to origins and survival within the universe. The emotions generated at such occasions ranged from contemplation to joy to adoration and supplication, and were usually of great intensity. In modern times people at equivalent rituals have become “the audience.”

**Dr. David Spiegel, M.D., psychiatrist, Stanford University:** Art can provide a socially sanctioned way to have an emotional experience....to say “it's o.k., it's normal to do it.” You turn it on and you turn it off. You walk out of a theater, and you've done it. That's one way in which groups are very helpful. They provide a kind of ceremonial structure, an experience of a shared emotion generated by what they're experiencing on the stage. There's something about shared emotions that facilitate a sense of social connection. Even if you are alone and anonymous, you do have a sense of a kind of common emotional experience. It's different from sitting alone in your living room watching a videotape.

**Dr. Ron Ruskin, M.D., F.R.C.P.C., psychiatrist, University of Toronto:** When one is a part of an audience, part of a group that is sitting, attention is directed most acutely toward a stage. There is an enforced passive state which may increase one's receptivity and responsiveness. In that acute, focused attention, there is a certain degree of passivity which, you might say, encourages one to surrender to the performance, with a resulting loss of the perception of time. While one might realize that two hours have passed, it may seem like only a few minutes, when you're listening to something that transports you. The individual's response is further increased by the group itself which magnifies, stimulates, may exaggerate through either their silence, their laughter, their tears, or in just the way their bodies may be moving kinaesthetically. Originally, music and dance were part of a group ceremony or ritual for healing with the most powerful effects enhanced by the group atmosphere on the person afflicted. There was some type of catharsis, going back to Greek audiences, that was important not only in a theatrical way, but in a ritual way. One identified not only with the performer, but with the group as a large body that is capable of acting almost like a chorus, which is listening and looking and responding to a similar thing. Thus, in our modern audience, a person present by themselves, may still feel connected by this sense of group involvement.

While the arts are not alone as a group or spectator ritual, it is their content that makes them unique. For example, although the roar and excitement of a crowd at a live sport event generates emotions, they are of a different nature and origin than those generated by an artistic event. The essence of the sporting event is competition, which perhaps

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<sup>53</sup> Solomon, “Emotions, Stress, and Immunity,” p. 174.

originates from a ritualization of combat. The emotions generated stem from the adrenaline and the related physiology of “the fight.” In the interview with Dr. Roger Dafter, the question was asked what was the lure of attending a World Series game at Yankee Stadium where people allegedly paid several thousand dollars for a ticket when they could have watched the game on TV at home.

**Dr. Roger Dafter, Ph.D., U.C.L.A. School of Medicine:** It's the ritual, the spectacle talked about in Greek theater. It's a ritualistic participation which enlivens and intensifies the emotions of that group process. The more people you get together, the more the emotions resonate at that level.

## IV. Live Arts Experience and...

### A. Optimism, Pleasure, Relaxation

In speaking to our “mind, imagination, soul, and heart” aesthetic experiences are usually associated with positive feelings and emotions such as pleasure and relaxation, positive mental states or beliefs states such as having “hope,” positive cognitive states such as having insights into ourselves and the world, and positive motivational states such as being “inspired.”

It has been less well studied, perhaps, but we do now have a strong suggestion that positive emotion, positive feelings and states of expectancy, can work not only to enhance our health but to eliminate disease, sometimes counter to all odds.<sup>54</sup>

Hundreds of scientific studies on thousands of people now report that individuals who expect the best, who are hopeful and optimistic, and who regularly enjoy sensual pleasures are, in general, healthier and live longer. While the results of any single study could always be debated or challenged, the collective weight of the evidence strongly points to how positive mood influences resistance to and recovery from disease. The opposite is true as well: negative moods, depression, hostility, and the lack of pleasure all seem to contribute to poor health. There appears to be a physiology of happiness which communicates to our heart, our immune system, our body.<sup>55</sup>

...engaging in responsible pleasures could be the single underestimated source of health in our times. The more optimistic view of man is that man is essentially good and with proper emotional health, he can be entrusted, even encouraged to engage in responsible pleasures that do not harm others or society and that a new role of the physician is to give permission, or even encouragement, to enjoy the beauties and bounties of life without guilt. The paradigm of medical optimism requires the imperative for inclusion of pleasure and its first cousin creativity into life as a prescription for total health. Physicians must

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<sup>54</sup> Ornstein and Sobel, Healthy Pleasures. (Reading, MA: Addison-Wesley, 1989) pp. 63.

<sup>55</sup> Ornstein and Sobel, Healthy Pleasures. (Reading, MA: Addison-Wesley, 1989) pp. 25-26.

not fear writing behavioral prescriptions for they are very much a part of the emerging new role of physicians and other health care providers.<sup>56</sup>

One key biological mechanism by which this aesthetic pleasure is produced, particularly in music, is through hormones, namely the endorphins, an acronym for endogenous morphines, opiate-like chemicals that induce euphoria and other physiological responses. As noted briefly in the section on emotions, according to one theory, arts create pleasure by producing tensions and resolutions, through a variety of means. Some theorists feel that these aesthetic tensions replace preexisting tensions we might have, and that we seek the arts for this reason.

Some works of art may be characterized by discord, tragedy, and other characteristics that put one on edge; aesthetic elements which leave one with tension or in a state of being unresolved. Even these situations can produce pleasure by absorbing viewers'/listeners' minds and distracting them from daily tensions, by allowing them to appreciate detail and overall craftsmanship, and by giving them a sense of closure for the experience itself, independent of elements which may have been left deliberately unresolved by the creator. Relaxation is also associated with most aesthetic experiences, whether through a reproduction, or live, the arts absorb our mind, consciously and unconsciously (as in background music), producing a distraction and relief from the tension and stress that grips most people's lives. Relaxation as defined here can also take place when one is provoked, challenged, confronted, or disturbed by a work of art because of its ability to engross our being, removing us from the daily world of tension and stress. Relaxation has been systematically studied; there are various meditative or mindfulness techniques that can systematically induce degrees of relaxation that have measurable impact on various elements of the immune system. Art's ability to induce pleasure and relaxation lies partly in its capacity to alter a perception of time.

**Dr. Ron Ruskin, M.D., University of Toronto:** Many people come back from a live presentation saying “I was literally transported.” When one is transported, one feels the capacity to access a part of oneself that may be in a state of suspension—not actually engaged. When that occurs, there is a sense of vitality, a sense of renewed wonder, awe, and joy.

**James Earl Jones, actor:** The stage, especially serious theatre, demands a different kind of engagement from the audience. We call it good listening. Being a good listener of stage requires a different commitment on your part. I can remember Alan Arkin told me when he saw the production of *Great White Hope*: he sat there in his seat for the longest time after the curtain went down thinking he was going to have a heart attack, that his body was so committed to that production. When it ended, something was taken from him, you know, something jarred him. Not the production as much as the fact that he said “I'm in a theatre and I was not there,” but yet his body had been there—it had joined the play.

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<sup>56</sup>Richard A. Lippin M.D., “The Impact of Responsible Pleasures on Health and Longevity.” A talk delivered at the Society of Prospective Medicine’s Annual Conference, Dallas, 22 March, 1996.

## **B. Coping, Stimulation, and Wellness**

One of the key elements of prolonged health or wellness is the potential for growth or self-actualization, for developing a feeling of competency or self-efficacy. While the arts can generate a wide range of emotions that can be experienced and assimilated, they also can generate different cognitive ways of perceiving the world. For example, abstract art, impressionistic art, cubist art and pop art all provide different constructs that help conceptualize the world and one's place within it. In theater, a play dramatically explores the worlds, the psyches, the interactions, and the life experiences of its characters. Through the play's externalization of feelings and life experiences similar to those we might have had prior to the drama, new insights are attained on coping with the stress of similar situations in our own life. In enabling us to do so, the playwright projects a philosophy of life and living that we also experience and can assimilate. The total experience becomes a structured, time limited encounter. These cognitive (and emotive) impacts are greatest at live arts experience.

Coping also entails dealing with stress. In contrast to relaxation, it is more pro-active, requiring a series of actions to deal with a challenge. The arts can provide additional perspectives and develop creative flexible thinking needed for alternatives providing additional tools for coping with stress. The successful ability to manage stress has been identified as the one personality or behavioral trait shared by centenarians, who often do not exhibit a pattern of diet or exercise. One French study of a person who died in 1997 at age 122 described the person as "calm, communicative, cheerful, optimistic, and tolerant." A Swedish study of centenarians has shown them to be "easygoing, and less prone to anxiety."

## **C. Hope and Inspiration**

Studies suggest that hope and hopelessness may affect outcomes such as physical health, mental health, coping strategies, and quality of life. Other potential outcomes of hope or hopefulness may be enhanced or altered immune system function, functional performance, the presence or absence of depression, level of adherence to a prescribed health regime, and/or level of active participation in rehabilitation.<sup>57</sup>

The enjoyment of the arts is often associated with its ability to instill hope and inspiration; hope that helps people overcome illness, drudgery, obstacles, and adversity, as well as the frailty we all will face someday, and inspiration that helps them persevere in spite of seemingly overwhelming obstacles. The arts have traditionally provided this inspiration. One reason hope enables one to transcend difficult circumstances is that it can motivate and inspire; it can lead one to say, "I will do it !!!" leading the body to follow through on that expectation. Art provides the meaning and structure which allow the psyche to enter, for a limited time, a world complete with (aesthetic) subjects, (aesthetic) drama and tension to which they are submitted, and the (aesthetic) resolution

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<sup>57</sup> Carol J. Farran, Kaye A. Herth, & Judith M. Popovich, *Hope and Hopelessness: Critical Clinical Constructs*. (Thousand Oaks: SAGE Publications, 1995) p. 191.

and higher meaning that is ultimately achieved. This symbolic experience can refresh the human spirit by creating a feeling and belief that the same dynamics of (aesthetic) confrontation and resolution will also prevail in the real life of the listener/viewer; that we will similarly feel a sense of triumph or transcendence. It is the experience of this symbolic success in working through challenges and conflicts to resolution that instills the belief that a similar feeling of transcendence can prevail in the perceiver's life. The key word here is transcendence, for most great works of art convey a sense of closure or finality that bring satisfaction, pleasure, and ultimately, the feeling that aesthetically, triumph can also be experienced in the real world.

The artist's mastery over aesthetic materials also fosters hope of attaining self-mastery, serving as an inspiration for people to persevere with challenges. We can admire the performance of an actor or musician, the writing of a composer, or the creation of a painter or sculptor, and come away exhilarated with a renewed sense of purpose and dedication to growth.

## **D. Isolation and Mortality vs. Social Engagement, Intimacy and Longevity**

Research studies from Sweden cited in this monograph suggest a strong correlation between frequent attendance of certain live arts experiences and longevity. Many conclusions are possible including this powerful demonstration of the health benefits of frequent social engagement with society.

**Dr. Sheldon Cohen, professor of psychology:** The more people are integrated into their social networks—have more different kinds of relationships with people—are married, have friends, have family, have people at work, have people at social groups and recreational groups—the more diverse their social network, the healthier they are. Put simply, people who participate in a wide range of activities in fact live longer than people who participate in fewer activities. It's also true that people who are socially integrated also have better mental health over long periods. This is a result of a greater sense of well being, a more integrated self-concept, more meaning and purpose in life.

One way these benefits can be demonstrated is by examining a life relatively devoid of social engagement...a life of relative isolation.

### **1. Isolation and Mortality**

Numerous studies have shown that, other things being equal, the mortality and morbidity rate is significantly greater for people who are isolated.

Studies done over two decades involving more than thirty-seven thousand people show that social isolation—the sense that you have nobody with whom you can share your private feelings or have close contact—doubles the chances of sickness or death. Isolation itself, a 1987 report in *Science* concluded, “is as significant to mortality rates as

smoking, high blood pressure, high cholesterol, obesity, and lack of physical exercise.” This finding is ominous in light of the increasing isolation bred by solitary TV watching....<sup>58</sup>

Human beings are social animals and find being alone very difficult. Our individual bodies share in a living social body and the health of each depends on our social connectedness. This view is in sharp contrast to the usual medical view of people as discrete and separate, with diseases that can be treated mainly with medication, surgery, or health regimes aimed at the individual.<sup>59</sup>

Single, separated, divorced, or widowed people are two or three times more likely to die prematurely than are their married peers. They also wind up in the hospital for mental disorders five to ten times as much. Heart disease, cancer, tuberculosis, arthritic, and problems during pregnancy all increase in those with weakened social connectedness.<sup>60</sup>

Of the things that frighten us, the fear of being left out of the human interaction is certainly one of the worst. There is no question that we are social animals; only in the company of other people do we feel complete. In many preliterate cultures solitude is thought to be so intolerable that a person makes a great effort never to be alone; only witches and shamans feel comfortable spending time by themselves. In many different human societies—Australian, Aborigines, Amish farmers, West Point cadets—the worst sanction the community can issue is shunning. The person ignored grows rapidly depressed, and soon beings to doubt his or her very existence. In some societies the final outcome of being ostracized is death: the person who is left alone comes to accept the fact that he must be already dead, since no one pays attention to him any longer; little by little he stops taking care of his body, and eventually passes away. The Latin locution for “being alive” was *inter hominem esse*, which literally meant “to be among men”; whereas “to be dead” was *inter hominem esse desinere*, or “to cease to be among men.” There is no question that we are programmed to seek out the company of others.<sup>61</sup>

For some people, such as those who live in rural areas, relative isolation is a fact of life. Radio, TV, CDs, computers, CD ROMs, books and other print media constitute their only access to the arts. Others may be isolated by reason of poverty, illness, serious mental or physical disability, or the absence of a partner. Lives can become disconnected, resulting in loneliness and sadness rationalized as just feelings, nothing significant. Such a state of affairs can be particularly devastating to the health of those with long-term mental or terminal illness.

**Gayle Bluebird, arts coordinator:** People with mental and physical disabilities have special needs that have to do with getting them out of isolation. They have had barriers because of their own difficulties and problems...money, economic, transportation, accessibility. So they tend to isolate themselves. That is the problem. They are differently able, but not their needs, not their likes, not their enjoyments, not their social interactions. They may do it differently, but I don't think their need for art is different. I'm trying to de-

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<sup>58</sup> Daniel Goleman, *Emotional Intelligence*. (New York: Bantam Books, 1995) p. 178.

<sup>59</sup> Ornstein and Sobel, *Healthy Pleasures*. (Reading, MA: Addison-Wesley, 1989) pp. 223.

<sup>60</sup> Ornstein and Sobel, *Healthy Pleasures*. (Reading, MA: Addison-Wesley, 1989) pp. 226-7

<sup>61</sup> Csikszentmihalyi, *Flow: The Psychology of Optimal Experience*, p. 165.

illness, de-mystify, de-program or peg or isolate, put into some other category, something that I think is universal. If it (art) is good for all of us, it's good for "them." Now we need to find a way to provide it.

A "healthy person" may have a greater margin of safety than someone who is sick, old, or depressed. The latter needs every opportunity to keep engaged in life and hopeful.

## 2. Information Technology and Isolation

When you're putting in seventy or eighty hours a week ...you don't have much time left for a healthy social life.<sup>62</sup>

For whatever purpose, be it work-related, or leisure-oriented, people are spending more and more time interacting with their keyboards or automated voices than with actual human bodies and voices. Computer-mediated art experiences can be considered detrimental on a variety of levels.

While the spread of knowledge and information via inanimate electronic media is undoubtedly socially beneficial in terms of increased exposure and facilitated information-exchange, meaningful social relationships cannot be maintained solely in the intangible. When cyberspace becomes the realm in which we not only give and receive information, but where we go to experience culture as well, certain critical elements of the benefits of social experience are sacrificed. Social isolation is the inevitable result.

In a recent New York Times article, the argument was put forth that "relationships maintained over long distances without face-to-face contact ultimately do not provide the kind of support and reciprocity that typically contribute to a sense of psychological security and happiness...."<sup>63</sup>

The Heaven's Gate cultists are merely a cyber space cadet caricature of the growing alienation of our minds from our bodies in an information society where we spend ever greater portions of our lives sitting in chairs, staring at screens....Obviously most of us aren't going to be packing our carry on luggage for a one way flight to the Evolutionary Level Above Human any time soon. But as increasing numbers of people spend more and more of their working lives and leisure time on the other side of the screen, a neo-Gnostic alienation is beginning to haunt mainstream America.<sup>64</sup>

Recently, Norman H. Nie and Lutz Ergring of the Stanford Institute for the Quantitative Study of Society conducted a comprehensive survey that attempted to assess the impact of the Internet on social functioning. Among the pertinent questions addressed in the report, Nie and Ergring ask "Will future workers continue to share physical proximity with their colleagues, or work largely alone wedded to digital devices with occasional

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<sup>62</sup> Howard Rheingold, The Virtual Community, accessed from [www.rheingold.com/vc/book/](http://www.rheingold.com/vc/book/)

<sup>63</sup> Amy Harmon, "Researchers Find Sad, Lonely World in Cyberspace" The New York Times, August 30 1998.

<sup>64</sup> Mark Dery, "The Cult of the Mind," The New York Times Magazine 28 September, 1997, p. 96.

electronic mail or voice communication? What will these changes mean for social trust and social life beyond the family? Will the growing trend of working at home with the aid of IT [Information Technology] help strengthen the family or add to the intrusion of the workplace into the home? Will it reduce the hours people work, or increase them by infusing work into every sphere of life, devouring leisure-time and family-life? And how will the Internet affect the role and use of the traditional media?"<sup>65</sup>

The findings indicate that the more time people spend on the Internet, the less time they spend in actual social situations, interacting with real human beings. As Nie put it, "Internet time is coming out of time viewing television but also at the expense of time people spend on the phone gabbing with family and friends or having a conversation with people in the room with them." In the press release for the study, Nie expressed great concern for certain results the study had revealed, especially the pervading sense of isolation Internet use seemed to induce. "The Internet could be the ultimate isolating technology that further reduces our participation in communities even more than television did before it," he said. The study indicated that of regular Internet users, that is, those using the net at least 5 or more hours a week, about one quarter reported that they spent less time with friends and family, either in person or on the phone, and ten percent reported spending less time attending social events outside the home.<sup>66</sup>

### **3. Social Engagement and the Live Arts Experience**

Enjoyment of live arts experiences can help offset these negative effects of isolation, both through attending an event in the company of others and through the intimate communication provided by the art itself. The decision itself to actively engage in society with others can help overcome mental lethargy and depression associated with isolation. The cultural event, then, enjoyed in the company of others, can provide an opportunity and inducement to share enjoyment, relaxation and communication. Conversations may start with the aesthetic and continue to more intimate subjects like personal likes, dislikes, aspirations, memories, problems, worries, etc. Such disclosure of thoughts and feelings is one key element in effective social support.

### **4. Intimacy through the Live Arts Experience**

Another way in which enjoyment of live arts experiences counters isolation is through the intimacy created by the art itself, a sense of connectedness with the creator of the art.

**Natasha Reatig, First Shot Productions:** Arts speak most profoundly in the realm of the mind, the imagination, the soul, and the heart. There is a direct message to the heart and the soul speaking to the spiritual values that many people with mental illness, unfortunately, find most lacking in their day-to-day environment. Too often people are

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<sup>65</sup> Norman Nie and Lutz Erbring, "Internet and Society: A Preliminary Report," Stanford Institute for the Quantitative Study of Society, Stanford Universtiy, February 17, 2000.

<sup>66</sup> Nie and Erbring, "Internet and Society: A Preliminary Report"

unwilling to engage with them on that level because they are too afraid. In theater, one can engage silently and privately with the performer.

**Dr. Stanley Greben M.D., F.R.C.P.C., University of Toronto:** A one-to-one connection or relationship with another person does something to diminish loneliness. Certainly conversation, being listened to, being understood, feeling close to and expressing the most intimate feelings is one of the most intimate ways. There is another way. When I am moved by a performer, I feel “he must understand me” just as Mozart understood me. Though I live many years after he died, he touches my heart, through his compositions, through the performer. Mozart (metaphorically speaking) is like me, and if he isn't, at least he knows about people like me because he can so communicate with me. The real experience of intimacy is with the art and the artist. They move me. They don't even know my language; maybe they spoke German and I speak English, but we both speak music, and it touches me. Anybody who moves me, knows more about me than someone who doesn't move me. That man who did all this composing in another time understood my humanness, my compassion, humanistic understanding, emotional warmth, and loving concern. He's addressing the deepest portion of my humanity through his art.

## 5. Longevity through the Live Arts Experience

The length of one's life depends on a number of factors. We are all aware of the importance of eating right and exercising in maintaining an optimal physical state. But can one's mental state of mind actually impact upon the length of one's life? If so, what are the factors involved necessary to achieve the coveted state of mind? Traditionally, members of the science-dominated medical community have shied away from the mental/emotional aspect of the issue, focusing instead on biology and the physical. However, findings from several significant studies are now emerging to challenge the school of thought that would rather leave “mental states” to the realm of alternative medicine.

Those who maintain a negative outlook on life may not live as long as their optimistic counterparts. Such is the finding of a study conducted by the Mayo Clinic in Rochester, Minnesota. While the study doesn't clarify exactly why this is so, according to its lead author, Dr. Toshiko Maruta, optimists are less likely to develop depression or “learned helplessness,” both of which contribute to self-perpetuating, and ultimately physically debilitating mental states. Optimists, on the other hand, when faced with difficult situations, might be more likely to “seek and receive medical help, with fewer tendencies to self-blame and catastrophic thinking.”<sup>67</sup> The study compared the results from a personality test taken by participants thirty years ago with their subsequent mortality rates, finding that those with higher pessimistic scores had a 19% greater risk of dying than their more optimistic counterparts. Says Dr. Maruta, “[The study] confirmed our

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<sup>67</sup> Toshihiko Maruta, MD, Robert C. Colligan, PhD, Michael Malinchoc, MS, and Kenneth P. Offord, MS, “Optimists vs Pessimists: Survival Rate Among Medical Patients Over a 30-Year Period.” *Mayo Clinic Proc.* 2000, 75: 140-143. Accessed from: <http://www.mayohealth.org/mayo/0002/htm/pessimistic.htm>

common-sense belief...that mind and body are linked and that attitude has an impact on the final outcome.”<sup>68</sup>

Additional studies conclude that the degree to which one is socially connected can significantly impact on one’s level of health, as well as how long one may live. There is consistent evidence that social support beneficially affects on aspects of the cardiovascular, endocrine, and immune systems.<sup>69</sup> Several recent studies support the profundity of this postulation. For example, a study conducted by Sheldon Cohen, Ph.D., from Carnegie Mellon University in Pittsburgh, PA, found that social connections may actually reduce one’s susceptibility to the common cold.<sup>70</sup> Social connectedness has long been thought to be a pivotal factor in the quality of life and the survival rates for the elderly, in particular. A study conducted by the Department of Health and Social Behavior, Harvard School of Public Health, in Boston, MA, determined that social disengagement is a severe risk factor for cognitive decline in elderly persons.<sup>71</sup> Another study investigating the affects of activity on aging arthritis sufferers found that solitary and physical activity had minimal influence on well-being, while social activity had a substantially positive influence.<sup>72</sup>

Yet another study, focusing on the mortality rates of frail elderly individuals in New Haven, Connecticut, revealed that “social and productive activities that involve little or no enhancement of fitness lower the risk of all cause mortality as much as fitness activities do.”<sup>73</sup> This study, which combined the efforts of the Harvard University School of Public Health, Department of Health and Social Behavior in Boston, the Rush Institute for Healthy Aging, Rush-Presbyterian-St Luke’s Medical Center in Chicago, and the Yale University School of Medicine, Department of Internal Medicine, Geriatrics, in New Haven measured the mortality from all causes in a random population sample of 2761 men and women from a random population sample aged 65 and older during a 13 year follow up.

Three types of activity were measured: social, productive, and physical activity, each of which were independently associated with survival, controlling for sex, age, race/ethnicity, marital status, income, body mass index, smoking, functional disability, and history of cancer, diabetes, stroke, and myocardial infarction. The study ultimately

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<sup>68</sup> Toshihiko Maruta, MD, Robert C. Colligan, PhD, Michael Malinchoc, MS, and Kenneth P. Offord, MS, “Optimists vs Pessimists: Survival Rate Among Medical Patients Over a 30-Year Period.” *Mayo Clinic Proc.* 2000, 75: 140-143. Accessed from: <http://www.mayohealth.org/mayo/0002/htm/pessimistic.htm>

<sup>69</sup> Uchino BN, Cacioppo JT, Kiecolt-Glaser JK, “The relationship between social support and physiological processes: a review with emphasis on underlying mechanisms and implications for health.” *Psychology Bulletin*, 1996 May; 119(3): 488-531.

<sup>70</sup> Published in *The Journal of the American Medical Association* <http://www.ama-assn.org/sci-pubs/sci-news/1997/snr0625.htm#oc6d13>.

<sup>71</sup> Bassuk SS, Glass TA, Berkman LF, “Social disengagement and incident cognitive decline in community-dwelling elderly persons.” *Annual Internal Medicine* 1999 Aug 3; 131(3): 165-73.

<sup>72</sup> Zachary Zimmer, MA, Tom Hickey, DrPH, Mark S. Searle, PhD, “Activity Participation and Well-being Among Older People with Arthritis,” *The Gerontologist*, Vol. 35, no. 4, 1995, pp. 463-471.

<sup>73</sup> Glass, TA, de Leon CM, Marottoli RA, Berkman LF, “Population based study of social and productive activities as predictors of survival among elderly Americans.” *BMJ*, 1999 Aug 21; 319 (7208): 478-483.

concluded that social and productive activities lowered mortality rates just as much as physical activity. Such findings suggest that longevity can be conferred through psychosocial pathways.

The direct manner in which these psychosocial pathways are accessed may also have a significant impact on the length of one's life. A study conducted by Lars Olov Bygren, professor of social medicine at Umea University in Sweden, found that people who frequently attend the movies, theater, concerts, art galleries, museums, enjoy longer lives.<sup>74</sup> This conclusion is based on a series of interviews conducted with over 12,000 Swedes ranging in age from 16 to 74. Those who regularly and frequently attended cultural events actually tended to live longer than people who merely sat at home. These findings initially generated stimulating questions by those involved. Professor Bygren wondered if the "art experience provides some sort of preparation for real life—for example for the threats and dangers to be found there? Or is it that all the body's biological health mechanisms are triggered when we feel uplifted and stimulated?"<sup>75</sup> If this is so, as these and other studies seem to suggest, the connection between mind and body can no longer be delegated solely to the peripheral worlds of sword swallowing circus acts but should be considered an integral aspect of mainstream medicine to be implemented in the spirit of preventive health.

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<sup>74,75</sup> Lars Olov Bygren, "Attendance at cultural events, reading books or periodicals, and making music or singing in a choir as determinants for survival: Swedish interview survey of living conditions," *British Medical Journal* No. 7072, Vol. 313, 1996. The entire study can be accessed from the *British Medical Journal* at <http://www.bmj.com>.

## Afterword

Recent artifacts discovered in Australia and Slovenia indicate that the enjoyment and creation of art may date back to the dawn of humankind, even its precursor; that art may have been as integral to life as food and shelter.

It remains so for many cultures and nations. Here in the United States, however, while the arts are an integral part of our daily lives through a variety of electronic and print media, public support for the arts, in schools, concert halls, theaters, museums, and other venues has seen profound cutbacks and retrenchment. To the public sector, the arts have been viewed as a frill, a luxury, something expendable when funds are limited.

Traditionally, advocates for the arts have relied on three major arguments as their ammunition for continued funding. The first, art-for-art's-sake, assumes that the arts are integral to what it means to be civilized; that they are a right, not a privilege. The second, is that the arts are a means of enhancing education, and can be integral to facilitating the acquisition of academic skills. The third is that attending the arts is a stimulus to the economy, creating jobs and revenue, in both the private and public sectors. This monograph provides an additional rationale: attending and enjoying the arts, specifically live arts experiences, is good for your health. That the experience is live is important because Americans have not grasped that they are consuming most of their cultural diet with the nutrients boiled away through electronic media. This is like eating vegetables and fruits that have been so overcooked that little nourishment remains. As with food, the curative or nourishing value that art can provide is at its greatest before it is processed, that is, before it is filtered through electronic media.

But there is hope. This nation is becoming increasingly preoccupied with health foods and nutrition at the height of a fast food "renaissance." America also seems to be obsessed with exercise clubs, exercise videos, exercise equipment at a time when people are spending a record amount of time vegetating in front of TV sets. One can therefore hope for, better yet, work toward, increasing awareness that live arts experiences are more enjoyable than their reproductions, more worth the effort involved to access them, and above all, more contributory to our health and wellness than is presently understood. Physicians prescribe medication. They can also recommend weight loss, smoking cessation, and exercise. One day, this writer believes, they will prescribe regular enjoyment of live arts experiences as a means of attaining health and maintaining wellness.

This prescriptive behavior will be sufficiently recognized as to merit equal treatment fiscally by HMOs as other forms of prescribed behavior that will be recognized because of their significant reduction of healthcare costs.

## Interviewees

Those whose remarks are not quoted within nonetheless played a crucial part in the shaping and development of this work; equal thanks is due to all.

Elizabeth Addison, Museum of Modern Art  
Jane Alexander, actress, former Chairman, National Endowment for the Arts  
Kavi Alexander, record producer  
Jerri Allyn, performance artist, Bronx Museum of the Arts  
Rev. Sally Bailey, Yale Medical School  
Judith Balfe, Ph.D., City University of New York  
Ted Berger, New York Foundation for the Arts  
Gayle Bluebird, Altered State of the Arts  
Jonathan Borofsky, sculptor  
Jamshed Bharucha, Ph.D., Dept. of Psychology, Dartmouth College  
Dave Brubeck, pianist  
Richard Brown, International Center for Film and Television  
Schuyler G. Chapin, Commissioner, New York City Department of Cultural Affairs  
Yoshiko Chuma, choreographer  
Sheldon Cohen, M.D. Carnegie Mellon University  
Ry Cooder, musician  
Roger E. Dafter, Ph.D., U.C.L.A. School of Medicine.  
Mark di Suvero, sculptor  
Sophie Feuerman, musician  
Tom Frost, record producer  
Stanley E. Greben, M.D., psychiatrist, F.R.C.P.C, University of Toronto  
John Hall, former Trustee, the Music Performance Trust Funds  
Nicholas Hall, Ph.D., Institute for Health and Human Performance  
Elaine Heumann Gurion, museum consultant  
James Earl Jones, actor  
Bill T. Jones, dancer/choreographer  
Lynn Kable, Society for the Arts in Healthcare  
Richard Kashalek, Museum of Contemporary Art, Los Angeles  
Lawrence LeShan, Ph.D.  
Alfred Leslie, painter and filmmaker  
Richard Lippin, M.D., CMO, EarthMed.com  
Frank London, composer and musician  
Jeffrey Lyons, film critic  
Jennifer Miller, performance artist  
Sherrill Milnes, baritone  
Mark Morris, choreographer/dancer  
Bertram Pepper, M.D., psychiatrist  
John Graham Pole, M.D. College of Medicine University of Florida  
Frank Putnam, M.D., National Institute of Mental Health  
Natasha Reatig, First Shot Productions  
Paul Rosenbaum, consumer advocate

Wayne Ruga, AIA, ISID, The Center for Health Design  
Ronald Ruskin, M.D., psychiatrist, F.R.C.P.C. University of Toronto  
Robert Shomer, Ph.D., psychologist  
Michael Spock, museum consultant  
David Spiegel, M.D. Stanford University  
Bonnie Sue Stein, producer/director  
Steve Suter, Ph.D., California State College  
Billy Taylor, pianist  
Mark Jude Tramo, M.D., Neurology Department, Harvard Medical School  
Eli Wallach, actor  
Cathy Weis, video artist and choreographer  
David White, Dance Theatre Workshop  
Naj Wikoff, C. Everett Koop Institute  
Ellen Winner, Ph.D. Boston College  
Robert Zatorre, Ph.D., Montreal Neurological Hospital

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