

Music and Medicine



International Doctors
Health Conference
Sydney - October 2007

John Edmonds

Music and Medicine: links to well-being

Is music good for health?
For doctors? For anyone?
Is music good?

- Which music?
- What is 'good'?

Music as Therapy

Google: BBC News: Music 'can ease arthritis pain'

Scientists in Florida found that just a 20-minute session once a day.....

The research...was based on 68 elderly patients...

A spokesman for the Arthritis Research Campaign said:

'Music can be very soothing and relaxing and may take your mind off your pain for a little while.'

Music as Therapy

Cochrane Reviews:

MT for schizophrenia: Gold et al 2005

4 studies

... as addition to standard care, helps improve global state and may improve mental state and functioning...

MT for autistic spectrum disorder: Gold et al 2006

3 small studies

... may help children improve communicative skills.

MT for pain relief: Cepeda et al 2006

51 studies involving 1867 subjects

... listening to music reduces pain intensity levels and opioid requirements, but the magnitude is small and its clinical significance unclear.

Music as Therapy

Active involvement more effective?

Choir of Hard Knocks

Film: As It Is In Heaven

‘Although preferences between the arts and decisions about what a work of art is, are personal choices, that does not mean they are unimportant. On the contrary, like ethical choices, they shape our lives.’

John Carey

‘What Good Are The Arts?’

Faber and Faber, London 2005

A personal view on music -

- No *specific* therapeutic value
- Wrong music: approaches the lethal
- Right music: central to **well-being**
- Provides:
 - standard of value
 - spiritual sustenance
 - consolation for the ‘divine comedy’
 - a big slice of life’s value

For others: Religion; the Australian bush; jogging;
C&W music; Rugby (NZ), cricket.....



Robert BURTON 1577 – 1640
Anatomy of Melancholy

Music hath the quality not only to expel the greatest griefs, but it doth extenuate fears and furies, appeaseth cruelty, abateth heaviness, and to such as are watchful, it causeth quiet rest.

It takes away spleen and hatred...

....and it cures all irksomeness and heaviness of the soul.

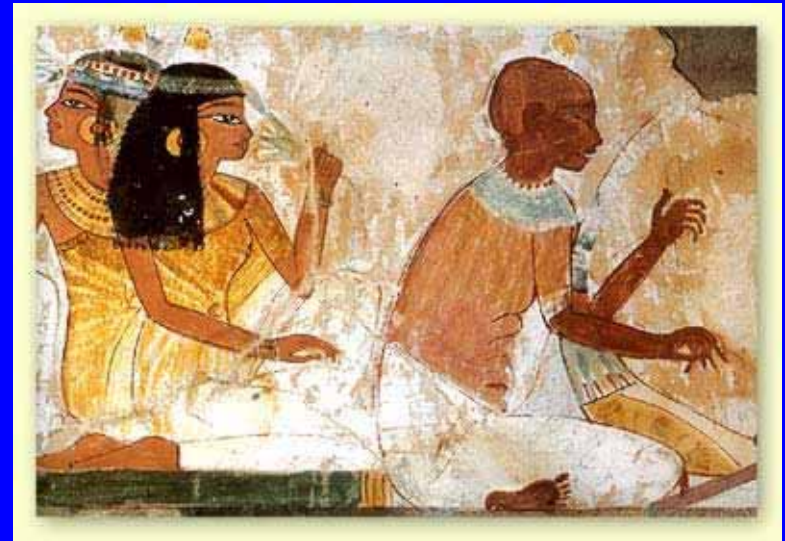
Music: an ancient and potent element.....



Slovenian 'flute'
54, 000 yrs old
? random



Chinese flutes
9,000 years old
- playable



Music of the Ancients



Pythagoras
~580-500 BC

Father of mathematics

- discovered that the pitch depends on string length
- ratio of keynote and octave is 1:2, perfect fifth 2:3, perfect fourth 3:4

‘Most profound relationships between spirit and matter’

Musica Universalis: 'Harmony of the Spheres'

- Drew together mathematics, cosmology, astrology, harmonics, music
- Pythagorean Brotherhood used music to heal the body and elevate the soul

Medieval concept of musica:

Musica universalis

Musica humana – internal music of the body

Musica instrumentalis



Johannes KEPLER (1572-1630)

Laws of planetary motion

Harmonices Mundi

‘...geometrical things have provided the Creator with the model for decorating the world’

Attempted to explain the proportions of the natural world – particularly the astronomical and astrological aspects – in terms of music.

He correlated the orbits of the planets to the intervals of the scale and found them to be ‘nothing other than a continuous, many-voiced Music, grasped by understanding, not the ear.’

The Merchant of Venice 5.1.53

Lorenzo:

How sweet the moonlight sleeps upon this bank

Here will we sit, and let the sounds of music

Creep in our ears. Soft stillness and the night

Become the touches of sweet harmony...

There's not the smallest orb which thou behold'st

But in his motion like an angel sings,

Still choiring to the young-eyed cherubim.

Such harmony is in immortals souls

But while this muddy vesture of decay

Doth grossly close it in, we cannot hear it.

Jessica:

I am never merry when I hear sweet music.

Lorenzo:

The reason is your spirits are attentive...

But music for the time doth change his nature.

The man that hath no music in himself,
Nor is not moved with concord of sweet sounds
Is fit for treasons, strategems, and spoils.

The motion of his spirit are dull as night
And his affections dark as Erebus.

Let no such man be trusted. Mark the music.

- Gregory the Great (540-604):
 - to make the liturgy more accessible, he involved music
- Polyphony:
 - Pope John XXII: *Docta sanctorum patrum* (1322) raged against it & banned it
 - Urban V: liked & reinstated it in 1364
- Martin Luther (1483- 1546):
 - ‘You will find that from the beginning of the world (music) has been instilled and implanted in all creatures, individually and collectively. For nothing is without sound or harmony...music is a gift and largesse of God, not a human gift. Praise through word and music is a sermon in sound.’

...this view of music is not universal...

- Kant: music seen as an inferior pastime
 - an enjoyment rather than an art
- Hegel: music ‘sadly has little to do with intellectual conceptions and ‘for this very reason musical talent declares itself as a rule in very early youth when the head is still empty’.

The response to music: neither robust nor reliable

Bryan Magee *Confessions of a Philosopher*

Father recommended Mahler by Bruno Walter

- meaningless phrases, arbitrary succession of notes, incoherent

Mahler conducted by Klemperer: 'and it was as if someone had fitted my brain with an unscrambler...now for the first time it spoke to me...I was transfixed...His (Mahler's) music became one of (my) most treasured possessions'.

J M Coetzee *Essays 1986-99*

Aged 15, in the back garden of his non-musical parents home in Cape Town, from a neighbours house, he heard a recording of music, unknown to him at the time - Bach's

Well-Tempered Clavier

played on the harpsichord:

‘As long as the music lasted, I was frozen. I dared not breathe. I was being spoken to by the music, as music had never spoken to me before.’

‘The question I put to myself...is this: is there some non-vacuous sense in which I can say that the spirit of Bach was speaking to me across the ages, the seas, putting before me certain ideals

Or was what was really going on at that moment that I was symbolically electing high European culture, and command of the codes of that culture, as a route that would take me out of my class position in white South African society?’

‘Art is the great mainstay of the people,
because it raises them above the petty cares
of the moment and shows them that, after
all, their individual woes are not of such
great importance.’

‘My artists should live like princes’

A political leader:

- The ultimate aim of political effort should be artistic achievement
- Supported music festivals, travelling art exhibitions and free concerts
- Personally funded (from royalties) grants, scholarships and tax abatements for artists
- On becoming leader, the first building commissioned was a massive art gallery
- A 'religious' enthusiasm for music and a detailed knowledge of many opera scores
- Knew the architectural ground plans of every significant building in the world



20th century music lover and patron of the arts

Doctors and Classical Music

Is the link stronger than expected by
chance?



Hector BERLIOZ 1803 - 1869

Son of a provincial French doctor
Model Romantic
Memoirs 1803 – 1865:



Harriet Smithson

‘My father did not want me to learn the piano, otherwise I should doubtless have swelled the ranks of the innumerable army of famous pianists.’



Berlioz

From *Memoirs*

Arrived in Paris in 1822

‘I was sorely tried when my fellow student, A.R., announced one morning that he had bought a *subject* (a corpse), and asked me to accompany him to the dissecting-room at the Hospital de la Pitié.

When I entered that fearful human charnel-house, littered with fragments of limbs, and saw the ghastly faces and cloven heads...such a feeling of horror possessed me that I leapt out of the window, and fled home as though Death and all his hideous crew were at my heels.

It was twenty four hours before I recovered from the shock of this first impression, utterly refusing to hear the words anatomy, dissection, or medicine, and firmly resolved to die rather than enter the career which had been forced on me.’



Alexander BORODIN 1833 – 1887

Illegitimate son of a prince who had him registered as the son of one of his serfs

Graduated in Medicine

Famous as a chemist with several discoveries
Established a Medical School for Women in
St Petersburg

Described himself as a ‘Sunday composer’

Music: Opera ‘Prince Igor’

3 Symphonies

2 String Quartets

Music commandeered for musical

‘Kismet’:

Baubles, bangles and beads: Q#2 Scherzo

And this is my beloved: Q#2, Notturmo

Stranger in paradise: Polovetsian Dances



The Borodin Quartet

Musicians who studied medicine....



Thomas CAMPION 1567 – 1620
English poet, composer, physician

Fritz KREISLER 1875 – 1962
Austrian violinist



Jean-Pierre RAMPAL 1922 – 2000
French Flautist



Zubin MEHTA 1936
Indian conductor



Doctors who were also musicians.....



Christian Albert BILLROTH
1829 – 1894

Founder of modern abdominal
surgery in the Vienna school

Violinist, violist

Friend of Brahms who dedicated
two String Quartets to him

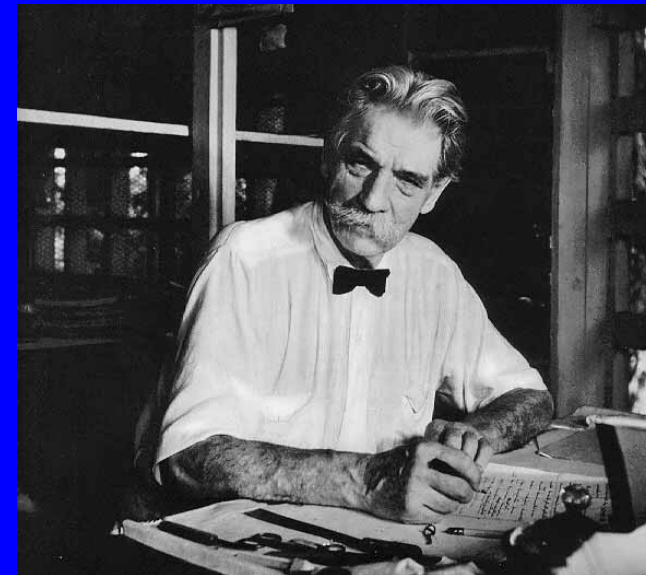


Jacob HENLE 1809 – 1885
of the 'loops'
String quartet player

Albert SCHWEITZER
1875 – 1965

Theologian, physician

Organist, Bach authority



Doctors making Music



Apollo Group - Melbourne



European Doctors Orchestra

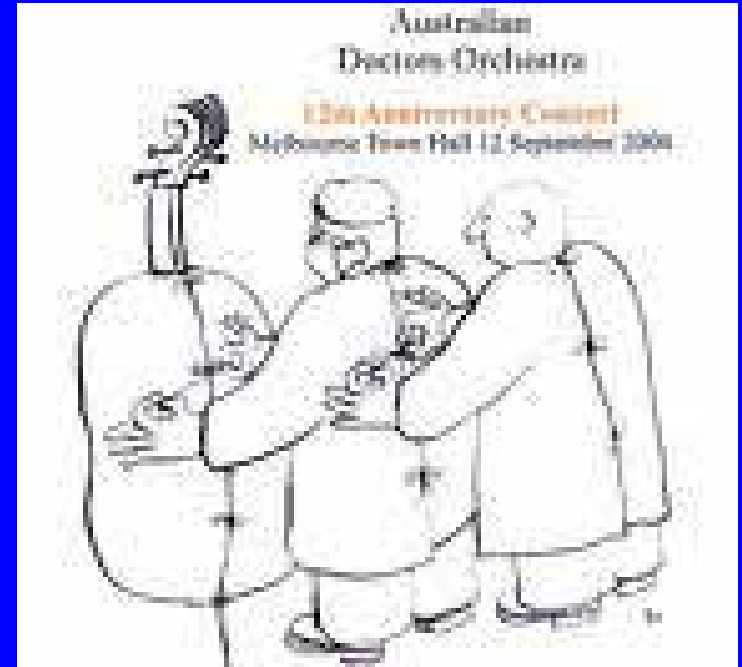


Berlin Doctors Orchestra



German Paediatricians Orchestra

Australian Doctors making Music



Australian Doctors Orchestra

Founder: Miklós Pohl

First concert – Melbourne 1993
with Melb GP William Kimber
500+ docs and students on database



George Steiner

in *'Errata: an Examined Life.'*

Music authorises, invites the conclusion, that the theoretical and practical sciences...will never map experience exhaustively. That there are phenomena 'at the centre'...which will endure, boundlessly alive and indispensable, but 'outside'.

Music is significant to the utmost degree; it is also, strictly considered, meaningless.

There abides its 'transgression' beyond intellect.