CHAPTER 2
THE POWER OF MUSIC

2.1 INTRODUCTION

“Music creates order out of chaos; for rhythm imposes unanimity upon the divergent, melody imposes continuity upon the disjointed, and harmony imposes compatibility upon the incongruous” (Menuhin 1972:9). On reading this quotation, the question arises: Is there indeed something immensely fundamental about these attributes that makes music a power?

This study endeavours to assess the importance of vocal music and the role it played during the Anglo-Boer War. It is, therefore, necessary to ascertain whether there is evidence that the axiom, which declares that music (not just vocal music) possesses a power or powers that can produce effects on the human psyche, body, society and civilisations can be validated. It is against this background that music’s potential as a power will be evaluated in the following cases:

- Belief in the Power of Music over Many Centuries

2.2 BELIEF IN THE POWER OF MUSIC OVER MANY CENTURIES

There is evidence to indicate that over many centuries people believed in the power of music, although there was no scientific evidence to confirm these beliefs. The vital significance attached to the phenomenon of sound is, however, important and will be studied in the following cases:

- Music and the philosophers
- Music in ancient civilisations
- Music in biblical times
- Music as emotional manipulation
- Music as a group ideological expression.
2.2.1 Music and the philosophers

Many of the great philosophers held pronounced opinions about the power of sung poetry (music). There is clear evidence in their works to support the fact that they considered music to be a powerful medium that possessed qualities other than the purely artistic. They emphasised the powerful effect of music upon human character and morals. Tame (1988:18) writes interesting accounts of his belief in the power of music. He believes that: “Since music seemed to hold such a sway in determining the morality of people, it was a subject which none of the great moral philosophers could ignore.” The validity of this statement will be tested in the works of the philosophers Plato, Aristotle and Confucius.

2.2.1.1 Plato (428-347 BC)

The Greek philosopher, Plato, was of the opinion that music is “capable not merely of affecting the emotions temporarily but of permanently influencing character” (Mountford & Winnington-Ingram 1984:67). In Book III of his Republic, music and the arts are discussed entirely from the point of view of the education of the guardians (professional soldiers) and how music should be employed to train both character and moral and aesthetic judgement. The modes and rhythms of music and physical training of the guardians should all aim at producing tough soldiers, “experienced enough in intellectual culture not to treat the unarmed citizens savagely, but not so softened by sweet food and music as to become incapable of fighting the cities’ enemies” (Plato 1995:70). Plato’s viewpoint was thus that music was a power that could influence a character negatively or beneficially. In order to combat the negative power that music could have on the guardians, he suggested a rigid censorship of music and poetry. This censorship meant the subordination of music for the good of the guardians (Grube 1980:206).

In connection with censorship, Plato discusses what Greek scales or modes he considers suitable for shaping young minds. He bans many modes but amongst

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8 Confucius (551-479 BC), Chinese philosopher, one of the most influential figures in Chinese history (Confucius [Internet] 2004).
others he advocates the use of the Dorian and Phrygian modes because they are fit to express the tones and accents of a brave man. Of these two modes, Plato says, “the one violent, the other tranquil, such as shall best imitate the tones of men in adversity and in prosperity, in a temperate and in a courageous mood” (Plato 1914:95).

So serious was Plato about the power of music, that he gave instructions regarding instruments and rhythms that should be excluded in order “to purge the city of the extravagances which are corrupting it” (Plato 1914:95). He says that a variety of string instruments, or instruments embracing all harmonies, should no longer be used “because rhythm and harmony sink, most deeply into the recesses of the soul, and take a most powerful hold of it … and also through music people are able to recognise good and bad” (Plato 1914:95).

Plato was aware of the power of music to influence negatively and thus advocated that all musical innovations be avoided. To achieve this, he advocated that music should be under state jurisdiction, which would disallow innovations and only allow music that would influence a law-respecting society positively (Scott 1969:39). In Book II of the Laws, he praises Egypt for forbidding musicians “to innovate on these models or entertain any but the traditional standards, and the prohibition still persists, both for arts and for music in all its branches … [and] in this matter of music it has actually proved possible to canonize melodies which exhibit an intrinsic rightness permanently by law” (Plato:33-34). It is clear throughout Laws that “he regarded the influence of music on behaviour as so profound as to be virtual ‘law’. Thus, in a literal sense, ‘song’ and ‘law’ were inseparable” (Anderson & Mathiesen 2001[a]:900).

Plato took a narrow view of the pleasure-giving function of music and emphasised a noble vision of the moral function of music. He was, however, not alone in his censorship of music, as other Greek philosophers also attributed various

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9 canonize (v.) To sanction by the authority of the church; to give authoritative sanction or approval to (Oxford [Internet] 2004).
emotional and ethical effects to melodies founded on certain modes. This was especially evident in the writings of Aristotle.

2.2.1.2 Aristotle (384-322 BC)

Aristotle presents music as a multi-faceted experience, possessing the power to educate, purge and to be used in the cultivation of leisure. He also considered music to be of fundamental importance in education. Like Plato, he considered music to have the power to influence people negatively or positively. He thus also censored the use of modes and criticised Plato for allowing the use of the Phrygian mode, as he believed that music in the Dorian mode could have the best effect on the soul (Mountford & Winnington-Ingram 1984:67).

Belief in the power of music can also be traced to the writings of one of the greatest Chinese philosophers, Confucius.

2.2.1.3 Confucius (551-479 BC)

Chinese philosophers of all schools recognised the unique role of music as an educational and diagnostic power. Discussion of leadership, public spirit, morale and morality all referred to music and its influence on man (Lam 2001:284).

One of the greatest Chinese philosophers, Confucius, believed there was “a hidden significance to music which made it one of the most important things in life, possessing potentially tremendous power for good or evil” (Tame 1988:17). Throughout his writings, he suggested that music could influence collective thought and it was thus necessary that man be made aware of the negative and positive influence of music. He thus advocated that man should be exposed to music that could purify and harmonise the emotions as opposed to the bewitching power of music found in the songs and dances of shamans and magicians. Confucius (Analects of Confucius) himself admitted that after hearing the song Shao he was affected so negatively that he did not know the taste of meat for three months (Lam 2001:246).
Many Chinese philosophers were motivated to study the influence of music on their nation in order to ensure that music that was played was beneficial to the state and its citizens. The writings of these philosophers clearly influenced the thinking of many emperors and as Confucianism, founded by Confucius, represented the way of life followed by the Chinese people for well over 2 000 years, it may be concluded that music played a very vital role in the Chinese culture.

2.2.2 Music in ancient civilisations

Many ancient civilisations were also aware of the inherent powers locked within the heart of all music and the fact that music could influence people positively or negatively. Some references to music in ancient China and Greece will be addressed.

2.2.2.1 Music in ancient China

China was one of the earliest civilisations to recognise the power of music. Long before the birth of Christ, the people of China were already in possession of one of the most “complex and fascinating philosophies of music of which we know today” (Tame 1988:33). According to the ancient Chinese, music had a sacred power, with each composition exerting specific influences over man and civilisation. This is demonstrated by the fact that Emperor Yu Ti Shun, a legendary emperor of the golden age of antiquity (c. 23rd century BC), toured his country during the second month of each year in order to ascertain whether there were problems. In order to check the morale and attitude of the different territories, he tested the exact pitches of the notes of instruments and music used in each territory (Tame 1988:15). On his return to the palace, he would listen to the five notes of the ancient Chinese musical scale. He had eight kinds of Chinese musical instruments brought before him and he compared the tones of the folk songs of the territories he had visited in order to see whether all the music was in correspondence with the five notes of the Chinese musical style. If he discovered that the instruments of the different territories were tuned differently, he “considered it a foregone
conclusion that the territories … might even lose their unity and begin to squabble among themselves unless the tuning was at once corrected and made uniform from one place to another” (Tame 1988:16). He clearly considered music as the most scientific and accurate mirror of the effectiveness of his government and the mood of his people.

With the founding of the Han dynasty (206 BC), the government, needing to stabilise the country, adopted Confucianism as the official ideology of China until the 1911 Revolution. The Han emperor, Wudi (156-87 BC), thus advocated state control of music based on Confucian music philosophy. He founded a Bureau of Music (Yuefu) which, amongst other things, had to establish national archives of suitable melodies and song texts and maintain the correct pitch standards, which were still considered a barometer for state well-being (Wolpert 1984:362). These conservative ideas concerning music inhibited composers and performers and European music appears to have had very little influence on Chinese music until the collapse of the Bureau of Music in 1911.

2.2.2.2 Music in ancient Greece

All the great Greek philosophers warned against the infiltration of music, which could affect a civilisation negatively. This respect for the power of music led to such artistic conservatism that, at Sparta and Athens, some musical innovators had their instruments destroyed. The works of the Greek composer and singer to the kithara, Timotheus of Miletus (c. 450-360 BC), came under sharp attack because of innovations. His boastful words concerning the innovations are reminiscent of the observation of some modern day bands: “I sing not the old songs, for my new songs are better; a young Zeus reigns, and Cronus’ rule was long ago; away with the ancient Muse” (Anderson & Mathiesen 2001[b]:482).

Innovations in Greek music continued but eventually Plato’s suggestions about how the power of music should be utilised for the good of the people were ignored. “Uplifting melodies and the former, disciplined styles were replaced by the novelty-
ridden, insubstantial sounds of exhibitionist stars. Greek music became trite and effeminate, and the people followed suit” (Tame 1988:189).

Tame (1988:189) is of the opinion that music led to the decline of Greece and the subsequent rise of the Roman Empire. He speaks about the power of destructive music within a civilisation. “It attains to a position of power and of widespread popularity with the masses within just a few years or decades; and its influence upon society in general is often similarly sudden, bringing about a swift and negative change in philosophies, politics, morals and lifestyles” (Tame 1988:189).

2.2.3 Music in biblical times

Throughout the Bible there are many references to singing and instrumental playing, which highlights the fact that music was considered a powerful instrument in biblical times. The book of Samuel describes how King Saul’s attendants searched for someone who could play the harp to treat their master’s malaise. “Whenever the spirit from God came upon Saul, David would take his lyre and play. Then relief would come to Saul; he would feel better, and the evil spirit would leave him” (NIV 1995:396 - 1 Samuel 16:23). The energising and ordering function of music, often employed in music therapy, was used by David to calm Saul.

Further evidence that music manifested itself as a power appears in many references to its use in Biblical passages. Trumpets are the most significant musical instruments in Scripture and they are associated with many different events throughout the Bible.

A very interesting passage in Joshua gives a vivid description of how the Lord delivered Jericho into the hands of Joshua through the scientific use of sound. The Lord gave Joshua clear instructions on how to destroy the walls of Jericho using sound produced in sequences of seven. “Have seven priests carry trumpets of rams’ horns in front of the ark. On the seventh day, march around the city seven times, with the priests blowing the trumpets. When you hear them sound a long blast on the trumpets, have all the people give a loud shout; then the wall of the
city will collapse and the people will go up, every man straight in" (NIV 1995:295 - Joshua 6:4-5). According to Scott (1969:38), the writer of the Book of Joshua must also have possessed some knowledge of the power of music and sound, “otherwise it is unlikely that he would have written the story of the Fall of Jericho.”

In 2 Chronicles 5:11-14 (NIV 1995:622) there is a vivid account of the music and singing during the consecration of the temple into which the Ark of the Covenant was placed. The detailed account of the instruments, i.e. cymbals, harps, lyres and 120 priests sounding trumpets, gives the impression of the power of specific tones to invoke sacred energy from heaven for the blessing of the temple. This is conveyed in the verses on the following page.

“The trumpeters and singers joined in unison, as with one voice, to give praise and thanks to the Lord. Accompanied by trumpets, cymbals and other instruments, they raised their voices in praise to the Lord and sang:

‘He is good;
His love endures forever’
Then the temple of the Lord was filled with a cloud, and the priests could not perform their service because of the cloud, for the glory of the Lord filled the temple of God”


The Book of Revelations is almost entirely devoted to prophetic revelations, with many references to music and the playing of trumpets. Trumpets are mentioned more in this book than in any other book in the Bible, and they are associated with the Second Coming. Trumpet sound throughout Revelations can be seen as a symbol of victory. Even when God gave John the special vision of the things he was to write, He spoke in a loud voice like a trumpet, e.g. Revelations 1:10 and 4:1. Another instrument spoken of in Revelations is the harp, always used as an instrument of praise (NIV 1995:1931 - Revelations 5:8; NIV 1995:1941 - Revelations 15:2). The sounds of harpists and singers are associated with deep joy for the predestined (NIV 1995:1930 - Revelations 14:1-3). References in New
Testament passages also teach that a trumpet will announce the Rapture (NIV 1995:1760 - 1 Corinthians 15:52; NIV 1995:1827 - 1 Thessalonians 4:16).

### 2.2.4 Music as emotional manipulation

In recent times, there is evidence that music is believed to have powers that can influence man. Many of these beliefs have not been scientifically proven. They are, however, important to highlight the fact that people have always believed in the power of music. Many of these beliefs regarding Voodoo\(^{10}\), Jazz, and the Ku Klux Klan\(^{11}\), affect the human psyche on an emotional level. Here examples will be given of music used in:

- Voodoo music rituals and Jazz
- Music in present day society.

#### 2.2.4.1 Voodoo music rituals and Jazz

Concrete examples of the often-perceived destructive use of music can be traced to its use in Voodoo rituals, as well as to Jazz. As Jazz is said to be rooted in the mingled musical traditions of African Americans, Voodoo and Jazz will be considered together (Jazz [Internet] 2004). Examples will be given of criticism with regard to these styles. The very fact that there was opposition to the styles is proof that the music was believed to be a threatening power, but there is still a lack of scientific evidence to validate this claim. Nuzum (2001:9) agrees with the fact that improper scientific method could take research out of context. He states that “[w]hile it is true (and well researched) that certain genres of music attract certain types of people, it is important to remember a fundamental truth of social science: Correlation does not prove causation” (Nuzum 2001:9).

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\(^{10}\) Vodou or Vodun, religion of Haiti, also practiced in Cuba, Trinidad, Brazil, and the Southern USA, especially Louisiana. It is commonly spelled voodoo, a spelling that, according to many scholars today, carries derogatory and inaccurate associations. Vodou combines elements of Roman Catholicism and tribal religions of western Africa, particularly Benin (Voodoo [Internet] 2004).

\(^{11}\) Ku Klux [also Ku Klux Klan] A widespread secret society, which arose in the Southern States of North America after the civil war of 1861-65, beginning with the effort to overawe the Negro population by whipping and arson, and developing a system of political outrage and murder. The Ku Klux Klan regained strength in the Southern States of the U.S. in the 1950s in opposition to the Civil Rights movement of American Blacks (Oxford [Internet] 2004).
During the slave trade, Voodoo crossed the Atlantic and took root in the Caribbean and the USA. Laws were passed against the playing of such music as early as 1619, but with little effect. It is on record that by 1835, blacks would gather in New Orleans to sing and perform acts of Voodoo. It also became the folk religion of Haiti and, in order to avoid persecution, the slave society constructed a Christian façade to camouflage non-Christian beliefs and practices, especially those that honoured ancestors and gods (Olsen & Sheehy 1998:795). There was evidence of malevolent and evil Voodoo music, which had as its very purpose the inflicting of harm upon other life. Tame (1988:189) recognises this when he states, “as the rhythmic accompaniment to satanic rituals and orgies, Voodoo is the quintessence of tonal evil”. The destructive power of this music is found in its rhythm, often executed on drums. Its multiple rhythms, rather than uniting into an integrated whole, are performed in a certain kind of conflict with one another. It is said that subtle nuances that are incorporated into Voodoo rhythms, while being too subtle for the ear of even the trained Western musician to notice, are actually the source of much of Voodoo’s claimed occult power (Tame 1988:190). This music was considered such a destructive power that ritual and musical practices, especially drumming, became the subjects of censorship, including a drum-burning campaign in Haiti as late as the 1930s.

Many musicologists and historians are of the opinion that the drum rhythms of Africa were brought to the USA during the slave trade. According to David Szatmary syncopated rhythms were and indigenous creation of black slaves who adapted their African musical heritage to the American Environment (Is there a connection between Rock Music or African Paganism [Internet] 2004). According to Southern (1971:139), “they [the slaves] brought with them only their worship of gods, their dances and their drum beats”.

The philosophers referred to in 2.2.1 and 2.2.2 spoke about the power of music for good or bad. With regard to the destructive power of music, there have been many discussions about the negative power of Jazz. This a very complex subject and this research will not enter into a polemic about the pros and cons of Jazz.
However, a few examples of opposition to Jazz in the 20th century will be highlighted in order to demonstrate that it was considered a very powerful medium.

The perception of the power of Jazz lay in the fact that many people were of the opinion that it was the cause of moral decay. A newspaper article of 22 June 1922 in the New York American (cited in Tame 1988:194) perceives Jazz as a cause of moral decay: “Moral disaster is coming to hundreds of young American girls through the pathological, nerve-irritating, sex-exciting music of Jazz orchestras, according to the Illinois Vigilance Association. In Chicago alone the association’s representatives have traced the fall of 1000 girls in the last two years to Jazz music. Girls … are victims of the weird, insidious, neurotic music that accompanies modern dancing.”

The perceived potential of Jazz to manipulate people emotionally can be traced to the American South. Here, members of the Ku Klux Klan, alarmed at the prospect of their youth being influenced by “Negro” music (Jazz), put up posters everywhere warning people of the dangers of this type of music and exerted pressure to force radio stations to stop playing Jazz and rock music on the air (Larson 1972:89). During the Second World War, Nazi Germany condemned all modern musical styles, especially atonality as well as Jazz, because “[t]hey smelled of revolution, of independent thinking and they were not Aryan” (Perris 1985:55).

Today Jazz goes virtually unchallenged and it has developed into a respected musical style. It remains an open question whether the moral decline of present day society can be attributed to, amongst other things, music and especially Jazz. It might be argued that modern man, who often considers music to be a non-essential aspect of human life, has not realised its power to degrade the individual psyche. Tame (1988:204) issues the following warning: “I adamantly believe that rock in all of its forms is a critical problem which our civilisation must get to grips with in some genuinely effective way, and without delay, if it wishes long to survive.”
2.2.4.2 Music in present day society

The secular world has been active regarding exploiting the power of music. Advertising has long since recognised the insidious effects of repetitive jingles. What appears to be a new heightened sense of fun may hide a more sinister effect behind the ‘fun’ factor. As the sound environment has increased, modern man has become so de-sensitised that he barely notices that the advertisements on the media tend to be louder, that he no longer hears sports commentaries or news report without a dominantly rhythmical musical rendering in the background. Whilst the use of music is recognised to promote interest, to engender fun, to lift spirits and to provide motivation, the balance is easily tipped in favour of the ‘fun/feel good factor’ allowing music to become mainly manipulative. Whilst captivated by the enjoyment factor, modern man ceases to be discerning or questioning and, as a result, is far more accepting of what he hears.

2.2.5 Music as a group ideological expression

Politicians who use music to manipulate people realise and believe in its power. That music was used as a tool for propaganda, is a clear indication that these governments saw music as a powerful weapon, and even turned to music to make an alien ideology survive. For the purpose of this study the following countries, which had strong ideologies that emphasised the group over the individual, will be studied:

- Russia
- China
- Nazi Germany.

2.2.5.1 Russia

When Stalin\(^\text{12}\) came into power in the Soviet Union, he realised that music that did not reflect Communist ideology posed a real threat to the stability of his regime. He

\(^{12}\) Joseph Stalin (1879-1953) Russian political leader, who was the undisputed leader of the USSR from 1929 until his death. He helped to convert communism in the USSR from an egalitarian,
was thus of the opinion that popular and devotional music was incompatible with Soviet society. In 1927, the avant-garde Association of Contemporary Musicians was absorbed into the conservative, ideological Russian Association of Proletarian Musicians. In 1936, the Union of Soviet Composers, whereby musicians and composers were given guidelines on how to echo Party ideologies, replaced this Association. If composers wanted their music performed, it had to be simple and conspicuously melodic and somehow had to describe the happy life (or supposition of it) in New Russia. The tragic effect of this restriction on Russian music resulted in the fact that by 1936, Russia’s “musical language had retrogressed to that of the nineteenth century” (Perris 1985:75).

Clearly the Communists saw music as a power that could change society if uncontrolled, hence the necessity to make music a vehicle which had to be controlled by the state. This was corroborated by the Russian composer, Dmitri Shostakovich, who, in an interview granted to The New York Times in December 1931, stated: “There can be no music without ideology … We, as revolutionaries, have a different conception of music … It is not a leader of masses, perhaps, but certainly an organising force! For music has the power of stirring specific emotions … Music is no longer an end to itself, but a vital weapon in the struggle. Because of this, Soviet music will probably develop along different lines from any the world has ever known” (Schwarz 1983:130).

Tame (1988:165) makes the point that what the Communists considered dangerous music was the very music that they used to upset the stability of Western youths. David Noebel (cited in Tame 1988:165) documented the attempts of Soviet-related radicals to set up record companies in the West “for the promulgation of hypnotic and harmful musical recordings for children, as well as for the releasing of left-wing and anarchistic rock and folk-rock discs.”
2.2.5.2 China

The power of music for ideological purposes clearly manifested itself when, around 1940, the Chinese Liberation forces initiated the organised use of music for propaganda by broadcasting revolutionary songs and choruses to the populace over a 300-watt transmitter. A revolutionary song was also composed with the text of Mao Tsetung’s early instructions on conduct for the Red Army, *The Three Main Rules of Discipline and the Eight points for Attention*. By means of this song, the Chinese Communists were determined to show the people on the farms and in the villages that the soldiers of the Red Army were not like the brutal, pillaging troops of the past. The text of the song dates from 1928, but as late as 1971 Mao was still urging the troops to sing this song (Gray 1996:51). Mao (cited in Perris 1985:99) stated, “An army without culture is a dull-witted army, and a dull-witted army cannot defeat the enemy.”

Further proof of the power of music can be seen in the fact that, during the Chinese Cultural Revolution (1966-1976), the government achieved almost total control of revolutionary music. The government was not prepared to expose people to outside music in case it portrayed a different ideology from their own. “Perhaps at no time in the history of music, Eastern or Western, has society endured such an extreme censorship of the performing arts” (Perris 1985:88-89). The control of music in China was extended to the schools where Western songs popular with teenagers were replaced with songs depicting rules of conduct. These rules, e.g. love of motherland, the people and Communist party, doing of homework conscientiously, keeping of clean clothes and not spitting, were all set to music to help young students remember (Perris 1985:105). During the second half of the twentieth century, the Chinese also had to observe a daily routine of anti-Capitalist songs (Tame 1988:69).

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13 Mao Tse-tung (1893-1976) [also Mao Zedong] He was a man who rose from the peasantry to become the pre-eminent revolutionary theorist, political leader and statesman of Communist China. Mao’s influence endured more than 40 years from the Long March of the 1930s, through the Red Army’s victory in 1949, until his death in 1976 at age 83. He remained chairman of the party to the end (CNN [Internet] 2004).
2.2.5.3 Nazi Germany

The Nazis were prepared to sacrifice artistic principles for ideology. The function of music in this repressive political system was threefold:

- aimed at uniting its own people
- propaganda
- purifying German music.

In an effort to exercise direct control of the country’s cultural life, the Nazis carried out an organised campaign of terror in 1933. Political agitation was employed to prevent some prominent musicians and composers (mainly Jewish) from carrying out their work. By the start of the Second World War, the Ministry of Propaganda’s Music Division was firmly entrenched and it detailed music that was declared unacceptable in the Reich. Numerous decrees were issued, banning the printing and performance of Jewish music and banning Jewish conductors. By 1938, 2310 Jewish musicians were expelled from Germany (Levi 1994:15).

Nazi control of music was extended to the tempos and keys that could be used. Composers were told to use major keys, not the minor key used by Jews and the tempos for compositions should be brisk but not exceed allegro which they felt was “commensurate with the Aryan sense of discipline and motivation” (Perris 1985:56). All opera houses were controlled by the Nazis and in 1940 the Reichsstelle für Musikbearbeitungen was established with the brief to rearrange librettos of neglected 18th and 19th century operas to reflect pro-Nazi propaganda and to alter the music to suit new political realities (Levi 1994:35). Anti-Semitism had serious repercussions for Handel’s works, which had texts drawn from the Old Testament, so many of his works were changed in line with Nazi ideology. His oratorios generated many arrangements, one of which was a revision of Judas Maccabeus, in the guise of the 16th century Netherlands freedom fighter, Wilhelm von Nassauen (Levi 1994:38).
2.3 INFLUENCE OF MUSIC ON THE HUMAN PSYCHE AND BODY

Examples given in 2.2 draw attention to beliefs in the power of music. Modern man has been able to prove, through scientific studies, that many of these beliefs are true. Instruments now exist not only for verifying, but also for measuring the effects of music on the body and its functions: galvanic reaction, blood pressure, body movement, metabolism, and electroencephalographic (brain wave) patterns (Feder & Feder 1981:132). This has resulted in many studies directed towards demonstrating what had previously only been believed - that music is able to influence the human psyche and body.

There are so many instances where music has been used to bring about emotional, bodily and mental effects that it would be impossible to address them all in this research. The therapeutic use of music is also so varied that only two examples will be highlighted in order to substantiate the theory that music is a fundamental power:
   - Music therapy
   - Music in education.

2.3.1 Music therapy

Controlled clinical studies have led to a growing understanding of how music can be applied to therapeutic advantage. Increasingly researchers are suggesting uses for sound and music in treating both physical and mental disabilities. To music therapists, music is a universal curative agent and what makes therapy particularly attractive is the fact that it heals the psychological cause behind disease, rather than merely suppressing the symptoms, as do most forms of medical treatment.

Music’s use as a palliative is also extensively documented. Don Campbell is one of these theorists who has devoted his life to making a case for healing through music. He reveals how exposure to Mozart’s music can have a lifelong effect on health, learning and behaviour and speaks of “the Power of Music to heal the Body, Strengthen the Mind, and Unlock the Creative Spirit” (Campbell 1997:v). He
specifically uses Mozart’s music for strengthening the mind and body and unlocking the creative spirit.

Tomatis\textsuperscript{14} reported that regardless of taste, the music of Mozart invariably calmed listeners, improved spatial perception and allowed them to express themselves more clearly. He also stated that the rhythms, melodies and the high frequencies of Mozart’s music had the ability to stimulate and charge the creative and motivational regions of the brain (Tomatis [Internet] 2004).

The therapeutic power of the music of other composers is also appreciated. Beethoven’s works are said to play a role in psychoanalysis. Scott (1969:66) confirms this in his statement that “people who listened to, but more especially played, his [Beethoven’s] works were conscious of a pronounced emotional relief. His music gave utterance to all those feelings which they could not, perhaps even dared not, express in any other way.” Tame (1988:74) agrees with Scott and states that Beethoven’s nine symphonies contain numerous themes and tonal references pertaining to the path of self-transcendence and its challenges.

There are many other examples of the therapeutic role of all kinds of music. The examples given, however, attest to the fact that music is a healing power and can be used in many situations to improve the quality of life. As it is such a broad field, it is virtually impossible to give a detailed description of the values of music therapy. It is also a field that is showing rapid development as therapists continue to discover more about the therapeutic powers of music.

2.3.2 Music in education

Increasingly the impact of music on every stage of human development is being revealed as research and technology probe the boundaries of knowledge, showing that many cognitive processes such as recall, creative thought, concentration,

\textsuperscript{14} Tomatis Method, founded in the 1950’s by Alfred Tomatis (1920 - 2001), a French ear-nose-and-throat specialist, who recognised the affects of Mozart’s music on patients with auditory problems (Tomatis [Internet] 2004).
problem solving and transfer of knowledge are affected by music. Michels (2001:6-28) states that neuromusical research uses “[s]cientific data on which new approaches to music education can be based, as well as some important answers to ‘why’ the musical intelligence needs to be developed in all learners, as an autonomous intelligence and for its role in associated learning.”

In 1994, Dryden and Vos warned against evaluation or testing systems in education that rewarded only a limited number of abilities. They recognised the fact that everyone has access to many different “intelligences” or intelligence traits. Harvard Professor of Education, Howard Gardner, who used prolific research to prove that each person has multiple intelligence centres, also challenged the view that intelligence was generally only defined as a combination of verbal and mathematical aptitudes. In 1996, Gardner, together with Hatch, developed the theory of Multiple Intelligences and identified music as one of eight intelligences. According to them, Musical Intelligence is the ability “to produce and appreciate rhythm, pitch, and timbre; appreciation of the forms of musical expressiveness” (Hatch & Gardner 1996:11).

The book, The Learning Revolution (Dryden & Vos 1994), provides descriptions of learning possibilities using music, especially Baroque music. It teaches people how to learn more in less time, enjoy and retain it. Throughout the book, music features as a learning tool. According to Colin Rose (cited in Dryden & Vos 1994:164), “Music can do in minutes what weeks of meditative practice strive towards.” Music suggestions are also given to enhance learning, as can be seen in Example 2.1.

In accelerated learning programmes, the use of music is especially valued as an educational tool. Michels (2001:5-42) states that music forms an integral part of the curriculum in many studies of academic, scientific and mathematical achievement. This is mainly because learning through music and sound and rhythmical activities activates the whole brain and makes it possible to master difficult concepts faster and with greater retention. According to Lehr (cited in Michels 2001:5-46), “[b]rain scan studies indicate that music more fully involves
brain functions in both hemispheres than any other activity the researchers studied”.

Example 2.1  Music Suggestions: Dryden and Vos

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<tbody>
<tr>
<td>Use different music for different purposes.</td>
</tr>
<tr>
<td><strong>For creating a calm atmosphere</strong></td>
</tr>
<tr>
<td>Relaxing music, like Watermark by Enja, non-vocal music such as The Lonely Shepherd by Samphir, Andante from the Lind Institute, or some of the tracks from Ray Lynch’s No Blue Thing.</td>
</tr>
<tr>
<td><strong>For getting in the mood</strong></td>
</tr>
<tr>
<td>Especially for cooperative learning activities, Deep Breakfast by Ray Lynch.</td>
</tr>
<tr>
<td><strong>For “clustering” and fast writing</strong></td>
</tr>
<tr>
<td>Antarctica by Vangelis or Brazilian in the Invisible Touch album by Genesis (the latter is especially popular with teenagers).</td>
</tr>
<tr>
<td><strong>For “poetry writing”</strong></td>
</tr>
<tr>
<td>December by George Winston.</td>
</tr>
<tr>
<td><strong>For putting poems and whole language to raps</strong></td>
</tr>
<tr>
<td>A selection of Hammer’s tapes, but just the instrumental part.</td>
</tr>
<tr>
<td><strong>For “state changes”</strong></td>
</tr>
<tr>
<td>Vary the music depending on the age groups, but generally any upbeat instrumental music, such as Switched On Beatles by Chase and Rucker for those who grew up in the Beatles era; C C Music Factory for today’s teenagers, and Elvis Presley music for those from an earlier era.</td>
</tr>
<tr>
<td><strong>For getting started with teenagers</strong></td>
</tr>
<tr>
<td>Right after a break, Strike it up by Black Box.</td>
</tr>
<tr>
<td><strong>For goal setting</strong></td>
</tr>
<tr>
<td>Chariots of Fire by Vangelis.</td>
</tr>
<tr>
<td><strong>For “visualizations”</strong></td>
</tr>
<tr>
<td>Slow music such as Kitaro’s Silk Road, Michael Jones’ Sunsets, and George Winston’s December.</td>
</tr>
</tbody>
</table>

*These are from selections used by Jeannette Vos in class. See page 174 for specific “active” and “passive” concert music. See also our resource lists at end of book for music catalogues and training manuals. Unfamiliar terms above are covered in later text.

(Dryden & Vos 1994:166)

The Bulgarian psychologist, Georgi Lozanov, also stresses the importance of music in accelerated learning. He “believes a well-orchestrated music concert can in effect do most of the teaching in a greatly reduced time.” The key elements of
the Lozanov technique are the so-called active and passive concerts where music is used “to maintain, and synthesize with the most effective learning state: alpha” (Dryden & Vos 1994:175). A summary of Lozanov’s technique using Baroque, Classical and Romantic music is given below. The mediums in Bach and BWV numbers are however lacking in his chart, making it difficult to know which works are mentioned. It is, however, still of interest to show his chart.

Example 2.2  
Music for learning: G. Lozanov

Georgi Lozanov’s music for easier learning

The Georgi Lozanov technique uses music in three distinct ways to accelerate learning:

1. Introductory music, along with deep breathing exercises, to relax participants and achieve the optimum state for easy learning.

2. An “active concert,” in which the information to be learned is read in time to expressive music.

3. A “passive concert” in which the learner hears the new information read softly against a background of baroque music, to help move the information into the long-term memory banks.

Here are a few typical selections:

**FOR ACTIVE CONCERT**

- Beethoven, Concerto for Violin and Orchestra in D major, Op. 61.
- Tchaikovsky, Concerto No. 1 in B flat minor for Piano and Orchestra.
- Mozart, Concerto for Violin and Orchestra, Concert No. 7 in D major.
- Haydn, Symphony No. 67 in F. major; Symphony No. 69 in B. major.
- Beethoven, Concerto No. 5 in E flat major for Piano and Orchestra, Op. 73 (“Emperor”).

**FOR PASSIVE CONCERT**

- J.S. Bach, Fantasy in G major, Fantasy in C Minor and Trio in D minor; Canonic Variations and Toccata.
- Corelli, Concerti Grossi, Op. 4, No. 10, 11, 12.
- Vivaldi, Five Concertos for Flute and Chamber Orchestra.

*Selections are from Language Teacher’s Suggestopedic Manual, by Georgi Lozanov and Evalina Gateva (1988), and Suggestology and Outline of Suggestopedia, by Lozanov (1978), both published by Gordon and Breach, New York.

(Dryden & Vos 1994:174)
The fact that Musical Intelligence is recognised as one of eight autonomous intelligences, highlights the fact that music is recognised as an essential educational tool and that educators are becoming more aware of the relationship of music to achievement in academic disciplines. This is mainly because “[n]euromusical research is providing valuable information about music processing. Brain imaging techniques have made it possible to understand how music learning affects brain activation patterns and networks, and to monitor how the brain learns and thinks” (Michels 2001:6-19).

2.4 CONCLUSION

This chapter highlighted the fact that over the ages there have been many beliefs regarding the power of music and that modern scientific tests have been able to prove the validity of many of these beliefs. The chapter thus highlighted the potential and possibilities inherent in music to make it a power that is able to operate on the human psyche and body. This is confirmed by Feder and Feder (1981:31), “The compelling interrelationship between the structured energy demands of music and the natural rhythm and responses of the body makes music a logical ordering instrument.”