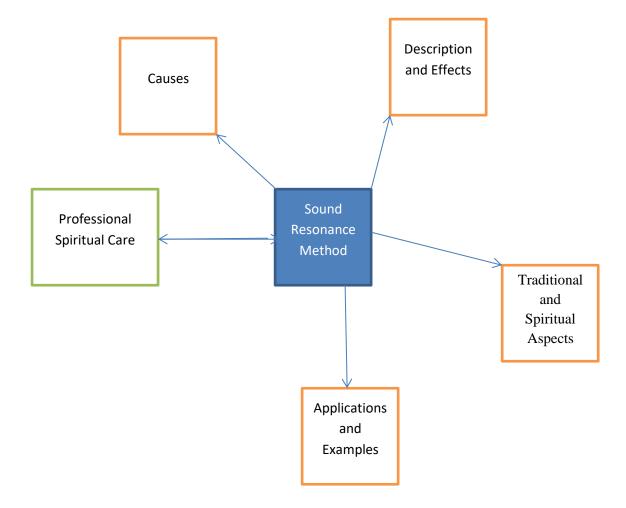


The Sound Resonance Method as a Tool of Spiritual Care an Introduction

by Rachel Bardach

Diagram: The Sound Resonance Method



Sound Resonance as a Tool of Spiritual Care

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Sound Resonance as a Tool in Spiritual Care

by Rachel Bardach

There are various methods in **Spiritual Care** depending on the needs of a patient and his/her culture: We might create a ceremony, sing a song or a melody, dance, read poetry in various languages or explore our sacred texts in order to get a human being in touch with his/her *Higher Self*. In addition, we might motivate our patients to a Spiritual Writing Project (as a form of Bibliotherapy) in order to get their mind calmed down.

Furthermore, prayer, song, contemplation and meditation or the use of Psalms may be a tool for the community and for conversation. In addition, depending on the cognitive and physical situation of the *individuum*, we can activate their senses via Music, Aromatherapy or Spiritual Artwork and Handicrafts so that they might be in touch with themselves.

However, the question arises, which effective spiritual service we may render to mankind, if a patient needs to be reached while suffering from extended dementia and Alzheimer, while being i. e. in a vegetative state of mind, when being inhaled artificially or when he/she is in the process of dying? Is there a medium to support the patient, to offer meaning or to perceive being when loving eye contact and empathy cannot change the atmosphere of a room anymore? How can we bring ourselves, our very presence, when our capability of active listening to a patient in need has to be extended and changed to non-verbal listening and perceiving?

Here, according to the writers' opinion, the **Method of Sound Resonance** might be an **optional tool of Spiritual Care:**

The Sound Resonance Method with Therapeutic Bowls, in brief, is a scientific method that has been developed by the German Physicist Peter Hess for app. 30 years. It has been taught and practiced in 22 Academies, worldwide. In addition, the European Association of Sound Resonance has been organizing academic lectures and conferences on an international basis. The profession Sound Practitioner is accepted and certified by the University of Berlin, Germany, Steinbeis Institut.

Therapeutic bowls in various sizes are either being put on or are being placed nearby a patient while softly being played with various kinds of mallets (while direct touch between the patient and the *Sound Practitioner* is possible but not necessarily required). The patient may perceive the sound *via* hearing or *via* the tactile sense. As a consequence, the patient can relax deeply by enjoying the sound or he/she may perceive how the sound waves spread and flow throughout the body and, therefore, be in touch with him-/herself.

Patients often experience *Sound-Resonance* as a kind of meditation and as deep release (by "letting go") when the spiritual so called "alpha state" is being reached. Here it becomes necessary to emphasize, that the **optimal effect of sound and vibration** can only be guaranteed if the bowls in use are properly manufactured and fulfill the necessary scientific criteria for *Sound-Resonance*.

Sound Resonance has been subject to research within the fields of Physics and Medicine. It has been applied in schools and kindergartens, parent's homes and hospitals, i. e. in Intensive Care, Palliative Care and in the field of mental health.

In **Israel**, on the contrary, the *Method of Sound Resonance* has – unfortunately – not yet been academically and professionally introduced; it only exists in the New Age and Wellness scene.

In the early 80ies, the German Physicist, **Peter Hess**, dedicated himself in measuring magnet fields of the earth, measurements of ions and radioactivity. In addition, **Hess** was involved in research in the fields of Orgone energy, Kirlian photography and energy of Acupuncture points.

Hess was ordained by the Architect and Researcher of Rituals, **Prof. Dr. Niels Gutschow**, **University of Heidelberg, Germany**, to measure energy fields in places of temples, ritual paths or religious objects in various countries, such as Scotland, Spain and the Far East.

Furthermore, **Hess** developed various methods in order to **measure subtle energies** in order to **demonstrate changes in the ''Human Aura of Sanity'';** these changes might be caused if a human being finds himself in a particular energy field. (**Hess, Koller**) (17)

The *terminus* **"Human Aura of Sanity"** was introduced by the Austrian Physicist and Psychoanalyst **Wilhelm Reich. Reich** belonged to the second generation of analysts after **Sigmund Freud** and developed **Character Analysis** and **Body Oriented Therapy.** After having escaped the Nazi Regime in 1939 to New York, he claimed to have discovered *Orgone,* which is a kind of biological energy. This biological energy is supposed to surround the body at a distance of about 15 – 30 cm, in other words the *human aura*. The *Method of Sound Resonance* is *also* being applied in this energy field. (**Herkert, Academic Lecture**)

According to James L. Oschman, Energy Medicine and Biophysics, National Foundation for Alternative Medicine, Washington, DC, USA, electromagnetic energy fields are created in all bio-chemical reactions in living organisms. These fields are also generated in molecular interactions and physiological processes, but they are all compatible. In normal tissues there are neither overlaps nor incompatibilities.

Thousands of physiological, biochemical and electronic processes are ongoing phenomena in the human body. With every heartbeat, every breath, every emotion, a characteristic electro-magnetic field is being produced, that travels through the living matrix up to more distant cells and tissues. (**Oschman**) (145 – 146) From here we may understand, that

everything has an atomic structure, an energy field, a so called *aura* that can be influenced through *Sound Resonances* by the vibrations of a scientifically manufactured therapeutic bowl, in other words by an instrument that fulfills certain physical criteria.

Dres. Halina Portalska and **Marek Portalski**, **Poznan University**, **Poland**, **Institute of Control and Information Engineering**, have been dedicating their research toward optimizing the sound resonance of therapeutic bowls by investigating their physical constitution. Their research describes the investigation of 100 different metal bowls. They assume that the sound of a certain metal bowl is being characterized through a special acoustic signal and its dissipation. According to scientific analysis, the sound of a therapeutic bowl might expand in concentric circles as well as in straight lines.



Measurements of acoustic signals

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With appropriate physical instruments, these complicated fluctuations and spirals can be made visible in figurative images; they result in different ways of expansions of single vibrations within the therapeutic bowl. The complex structure of sound and vibrations, therefore, might have its effect on various deep levels, such as the **flow of body liquids**, when a therapeutic bowl is being placed, for example, on a human body. (202)



Expansion of Sound Waves

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Dres. Portalski claim that the sound resonance of concrete metal bowls might stimulate both sides of the brain; therefore, by fulfilling the necessary criteria, patients might feel stimulated and expanded. On the contrary, the sound resonance can have a paralyzing and, therefore, calming, effect.

In addition, a metal bowl that fulfills certain criteria and that is being played with a specific mallet creates a certain sound resonance and vibration while the sounds differ from various places of the same metal bowls. Despite the symmetric quality of the metal bowl the sound resonance and vibration are not identical. From here we may understand that at various parts of the metal bowls some sounds might fade away faster or slower. As a consequence, we can clearly understand the importance of specially manufactured therapeutic bowls and professionally trained *Sound Resonance Practitioners* in order to reach the necessary effect. (Portalska, Portalski) (191 - 206)

Originally metal bowls had been used in the Far East (Nepal, India and Tibet) as food utensils and possibly as containers for ritual offerings; Japan, China, Thailand and the Himalayas are understood to be countries of origin, too. Metal bowls have been existing in various shapes and sizes and are made from different materials, such as copper, bronze, tin and lead; they have been manufactured since app. 4000 BC. By beating the metals, the craftsmen brought about - **sounds**.

In the 60ies the Hippies discovered metal bowls as musical instruments and commercialized them in the West. In the early 80ies, the Physician Peter Hess, on the contrary, started to develop therapeutically useable bowls scientifically. (Herkert, Academic Lecture)

On a pure physical level, **sound** can be understood as an **acoustic signal being transmitted via sound waves** which spreads in a reciprocating motion. In order to spread, the sound needs an elastic medium, i. e. gases, liquids, solid bodies or air (in case of hearing). The ear perceives the sound as a variation of pressure of the air.

When a therapeutic bowl is being played, it starts to **vibrate** and, therefore, sets the <u>air</u> in its immediate surroundings in motion. In the <u>air</u> sound spreads with a speed of 330 m per second. If a therapeutic bowl is filled with <u>water</u>, this *phenomena* becomes visible for the human eye. <u>Water</u> conducts even better and faster at a speed of 1.500 m per second.

Here it becomes important to emphasize that the human body consists of 70 - 80 % of liquids and it is, therefore, to be understood that the sound spreads within it. In other words, by applying the Method of Sound Resonance with a Therapeutic Bowl, the air and the human body are being used as a medium for the sound. Hereby we understand, that the acoustic signal is perceived by the 1) ear and at the same time as an 2) vibro-tactile (feeling of touch) impulse directly by the human body. (Herkert, Academic Lecture)

Uwe Ross, Doctor of ENT and Psychotherapist, University of Freiburg, Germany, developed a new concept within the field of Tinnitus-Therapy and modern Hypnosis in connection with the *Sound Resonance Method*. When an **acoustic signal** enters the ear, it is being processed in form of nerve impulses and, as a consequence, enters the brain. These signals also cause emotional nuances, in other words, when a sound or a noise reaches the human being, the so called limbic system colors these impulses acc. to our previous experiences.

Tonotopy, in Physiology, is the spatial arrangement of where sounds of different frequency are being processed in the brain. To these tonotopycal processes, evidence can be given to *via* modern methods like, for example, functional Magnet Resonance Tomography (fMRT) or through the so called Magnet Cephalography (MEG). Occurrences in the brain, such as thinking, feeling and memorizing can be portrayed in a picturesque way and objectively. (**Ross, Uwe**) (70 - 87)

As mentioned above, sounds are also being perceived *via* **somato-sensorical perception**, in other words *via* the **tactile sense**. Already in 1966, the **Physiologists Dres**. **Ehrenberg**, **Finkenzeller**, **Keidel and Plattig**, **University Erlangen-Nuernberg**, **Germany**, carried out experiments about the *sense of vibrations of the human being*. They dedicated their research to the processes of the brain and the best frequencies of the sense of vibration.

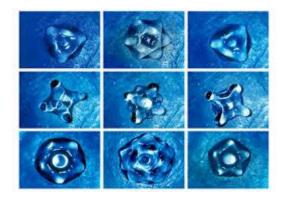
Acc. to the results of their research, the optimal frequency of the sense of vibrations lies within the realm of the lowest frequencies of Therapeutic Bowls. Furthermore, new results in the same field affirm the best frequencies for the sense of vibrations of human skin acc. to the research of **Dres. Birnbaumer & Schmidt. (Biological Psychology, Springer, Heidelberg, 2006)**

Within the field of somato-sensorical perception (tactile sense), **Ross** differentiates between *exteroception*, in other words perception of **vibrations** from <u>outside</u> *via* the skin and *interoception*, the perception of vibrations from <u>inside</u>. If, for example, a Therapeutic Bowl is being played on the stomach of a human being, the skin is being stimulated in a rather mechanical way. However, by doing so, the **stimulation extends** *via* **feel receptors in muscles and** *inner* **organs.** (**Ross, Uwe**) (70 - 87)

From here we may understand that patients can perceive the outer and inner spread of sound waves – **vibration** - and, therefore, may relax deeply. They have the possibility to *be in touch with themselves* in a harmonious way, regardless their often rather difficult cognitive or physical constitution (i. e. respiratory care, coma patients, intensive care, *see below*).

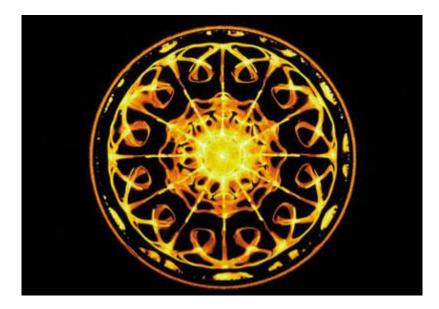
As human beings, *de facto* all *flora et fauna*, we are **connected and interwoven with the elements**; in the 60ies, the Swiss Physician, Hans Jenny, animated water with various frequencies and called the phenomena *kymatic* (*Greek:* wave), meaning the science of sound pictures that are created through water. Depending on sound frequencies, living structures can occur on the water surface (see Title Picture).

This principle had already been observed in the 18th century: sand, being brought into motion on a metal plate through a vibrating violin, formed itself into beautiful forms. If a drop of water, acc. to **Jenny**, gets into motion, movements of the original process of the world becomes obvious: **the gesture of convex and concave (like a <u>lens)</u>**



A vibrating drop of water, Alexander Lauterwasser (Cosmic Blueprints)

In the beginning was the **sound**, the Big Bang, from whom *materia* and forms developed, all of them acc. to the law of Geometry and nature. **Water sound pictures** follow, therefore, the **scientific laws of Chaos and order** like, i. e. sounds, blossoms, plants, animals and organs. Sound pictures are being created through vibrations in the water; similar to *mandalas*, they can have a calming and relaxing effect on human beings.



Alexander Lauterwasser, Klangbilder



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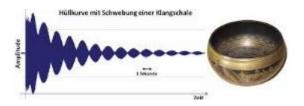
Coming back to the **scientific laws of chaos and order**, we may also notice an interesting **spiritual criteria** right in the very beginning of the Torah, *Sefer Bereshit*, Genesis, which describes a state of *tohuwawohu*, **chaos**, and the *spirit of G-d hovering on the face of the waters* (Gen. 1,1), while, later on, *G-d made a division between the waters and the waters* (Gen. 1,6).

בראשית ברא אלקים את השמים ואת הארץ. והארץ היתה תהו ובהו וחשך על פני תהום ורוח אלקים מרחפת על פני המים. ... ויאמר אלקים יהי רקיע בתוך המים ויהי מבדיל בין מים למים. (בראשית א', א'- ו')

From here we may understand the waters as the original substance of all of life and development, while the spirit of G-d by *hovering* on its surface, creates a **sound** by doing so. (**Pear, Rachel, Personal Meeting**)

Here the question arises where the sound, the *hovering*, will lead us to. If we watch the speed of volume of vibrations that show naturally created sounds, than often we find similar structures: a quick rise of volume, caused by playing of an object with the potential to vibrate, is rather slowly fading away.

While the woods, stones or drums are fading away rather quickly, the strings or *Therapeutic Bowls* show a rather long time of after-resonance and, therefore, fade away rather slowly. Herewith, *Therapeutic Bowls* show so called *hovering*, in other words, fluctuations of volume in a radius of low frequencies. These frequencies of *hovering* are to be found in the area of electric signals of the brain (EEG) and, therefore, can support certain states of consciousness.



Speed of Volume of Vibration; Fluctuations of Volume; European Association of Sound Resonance, 2019.

Furthermore, the Hebrew letter *aleph*, which is the first letter of the Hebrew Alphabet, is standing for G-d beyond time and definition. This letter is a **silent** one. The first chapter of the Torah, *Bereshit*, Genesis, which describes the separation from the waters and the hovering, starts with the 2nd letter of the Hebrew Alphabet, the letter *beth*; this very first chapter describes the states of creation. It is interesting, that this particular letter, the *beth*, creates the **first sound** in the Torah by being **pronounced**. (**Rabbi N. N., Personal Meeting**)

The Hebrew letter Alef



The German Chemist and Musician, **Wolfgang Saus**, is specialized in overtone music. Overtones are tones which form the basic sound. They determine the type of the coloring of the sound. Somebody who speaks has his/her own pattern of sounds. While speaking we cannot hear any overtones due to our own melody of language.

Overtones might be filtered through special techniques and, as a consequence, harmonic vibrations can become obvious. **Saus** understands **overtones** to be the *music of the universe*. Acc. to **Saus**, therapeutical projects show their first results with autistic children. Alzheimer patients seem to react on overtones and concert visitors mention the calming result of overtone music on a regular basis. **(Saus, Wolfgang)** (2008)

Overtone instruments, like the Therapeutic Metal Bowl, are i. e., the harp, the lyre, cello and the monochord; in addition, the Didgeridoo (invented by Indigenous Australians) finds its resonance in the form as a widespread brass aero phone. In addition, the human voice can be an overtone instrument, too. It is interesting, that dolphins and whales also function on overtone frequencies.



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During his research at the *Dolphinarium* in Eilat, Israel, **Saus** developed an "overtone dialogue" with the dolphins. Acc. to the results of the experiment, human overtone frequencies can be identical with the sounds the dolphins communicate with each other under the water. (**Saus, Wolfgang**) (185 – 189)

Elementary Instruments within the *Method of Sound Resonance* are, as mentioned above, a) Therapeutic Bowls, but also b) Gongs and c) Cymbals.



Set of Therapeutic Sound Bowls: Heart Bowl, Universal Bowl, Pelvic Bowl, Cymbals

(PHI Archives, 2019)

The **Fen-Gong**, for example, is an instrument that belongs to the group of metalidiophones made of brass. It is being **shaped like a <u>lens</u>**, and its sound effect can have a rather widening effect on a patient. As a consequence, the importance of professional appliance of the *Sound Resonance Method* in a professional and a rather sensitive way becomes obvious, since in Classical China, Gongs were used as torture instruments due to their potential intensity.

The **Tam Tam-Gong**, which originates from China, is made of bronze. Its sound character resonates from very low to very high and often is being associated with thunder (low frequency) and dolphins (high frequency). Playing the Tam Tam Gong demands responsibility, much practice and mindfulness.

Therapeutic **Cymbals** are being particularly produced for the application of the *Sound Resonance Method*, similar to the Therapeutic Bowls. They are manufactured from a highquality bronze alloy of seven metals in order to create a high and pleasant sound. Their sound might be similar to traditional Cymbals. A clear, long-lasting and rather soft sound with a gentle effect might be produced while playing Cymbals.

Sounds and music always played a significant role in the history of mankind as such, and the worship that was developed and practiced by the Jewish people: after the escape by the Israelites from Egypt, **Miryam the prophetess** took out her timbrel, danced and sang and all the women followed her.

ותיקח מרים הנביה אחות אהרון את התף בידה ותצאן כל הנשים אחריה בתפים ובמחלת. (שמות, טו , פס' כ)

"And Miryam the prophetess, sister of Aharon, took her timbrel into her hand and all women followed her with drums and dance." (Ex. 15, 20)

The prophets played musical instruments. They used harps, tambourines, flutes and lyres (1. Sam. 10, 5). King David is portrayed as soothing Shaul's tormented spirit by playing the lyre (1. Sam. 16, 23). He was a skillful lyre player (1. Sam. 16, 18 - 23), which is, *de facto*, an overtone instrument and nowadays popularly being used as a therapeutic instrument (in a modified form) by being applied to hearing and to the tactile sense as well, due to its vibrations.

Furthermore, the ancient musical Jewish horn, the **Shofar**, had been blown as an overtone instrument in the Jerusalem Temple, nowadays on the High Holidays. Acc. to Ex. 19 ff., the blast of a shofar emanating from the thick cloud on Mount Sinai made the Israelites *tremble in awe*, most likely due to its vast **vibration**. Nowadays, the Shofar is being blown from the month *Elul*, during *Rosh HaShana* (New Year) and on *Yom Kippur* (Day of Atonement) in order to remind the Jewish People to return to G-ds path and to their moral deeds. **Rebbetzin Dr. Rachel Pear**, **Philosopher**, **Haifa University**, interprets the modern ritual use of the Shofar as a *communal sound treatment* for a year based on the inner process of the Jewish community which is being caused by the resonance of the Jewish Horn. (**Pear**, **Personal Meeting**)

In the **Book of Psalms** (*Sefer Tehilim*), a great variety of musical instruments is being mentioned. Some instruments were made of **metal**, **such as bronze cymbals** (*zelzelim*) **and trumpets** (*hazozerot*). (1 Chron. 15), others were percussion instruments or stringed instruments. King David emphasizes that the above mentioned instruments were manufactured in order to offer praises to G-d (1 Chron. 23, 2-5).

Through the attachments of **Bells** (next to pomegranates) to the lower hem of the High Priest's Ephod (Ex. xxviii. 33), he might had been heard on entering the High Place. Furthermore, he might have worn the ringing bells as a memorial to the children of the Jewish people (Sirach xlv. 9). According to the Rabbis there were 72 Bells. In Talmudic days Bells were used to summon people (Naz. Vi. 1). (Adler, Cyrus and Jacobs, Joseph) (2002 – 2011)



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Acc. to the **Jewish Tradition**, the heading *A Psalm of David*, is being found at the beginning of most Psalms in the first two books (Psalms 1 - 72). In addition to King David, Asaf is supposed to be a poet of various psalms, too, who must have added to the prosaic practice of adoration. **The human voice**, also, had its place in the Temple. The *Levites*, who ministered to the *Cohanim* (priests), formed and practiced a division of **Temple singers**.

The *Levites*, in addition, were set apart as **cymbalists** (I Chron. xvi.42). Cymbals (*zelzelim*) functioned in the Torah to mark time or rhythm at dances or for singers. Furthermore, they accompany trumpets (*hazozerot*) (Esra iii.10) and they were part of various religious ceremonies (I Chron. xv. 16, 19; II Chron. v. 13, xxix 25; Neh. Xii. 27). Cymbals were made of brass (I Chron. xv 19; Josephus, "Ant." vii. 12, Paragraph 3; Yer. Suk. v., end) or of copper with a slight mixture of silver. They varied in size.

The Mishna (Ar. 13 a; compare Gem. 13 b), on the contrary, states that **only one pair of cymbals** was used in the Jerusalem Temple. A special officer, **Ben Arza**, is mentioned in the scriptures to fulfill the task of ringing the **Temple Cymbals** (*zelzelim*) (Shek. V. 1; Shek. 48 a). The sound of the cymbals gave the signal for the *Levites* to chant the Psalms (*Tehilim*) (Tamid vii. 3, 4). Other sources claim that the instrument in the Jerusalem Temple consisted of only one plate, like a lens, i. e. globe shaped. This instrument was fixed, in other words, stationary, and was beaten by the performer with a clapper or hammer, maybe similar to a gong. (**Hirsch, Emil G.**) (2002 - 2011)

As mentioned in the Psalms (*Tehilim*), Cymbals (*zelzelim*) are described to be **high sounding** (*zilzele truah*) and **loud** (*zilzele shema*). The cymbals in use in the Jerusalem Temple were specially emphasized by the Rabbis of the Talmud; they had been undergoing **regular improvement concerning the quality of the tone** (Yer. Suk. v., end). As a consequence, their **loud and far-carrying sound** was remembered, specially. (ib. 55; Tamid 30 b)

Peter Hess, German Physicist and Founder of the professionally applied *Sound Resonance Method*, asks his students during his lectures on a regular basis: "When did you *eavesdrop* for the last time?" As a matter of fact, for an observing person, the Jewish Tradition provided eavesdropping not only through ancient temple instruments but, in addition, nowadays, twice a day by reciting the prayer Shma *Israel* (Dt., 6, 4).

שְׁמַע יִשְׂרָאֵל 'הוה אֱלֹהֵינוּ 'הוה אֶחָ

"Hear, o Israel, the L-rd is our G-d, the L-rd is One."

The **soundful recitation** of the *Shma Israel* gives a person the opportunity of reaffirming his/her relationship to G-d. Interesting is the **special holding** of the letter *ayn* in the end of the word *Shma*, and, in addition, the **vocal emphasis** of the last letter of the word *echad*, this for *Kabbalistic* (mystical) reasons and therefore not as a publicly learned tradition. Furthermore, there are also two larger print letters in the first sentence of the prayer for the *ayn* and the *echad*.

From here we may understand, that **sounds** have their sacred place in an old and venerable tradition like the Jewish one. They can touch a human being's innermost spiritual place. As a consequence, a person may identify with the metaphysical or with a community from a collective point of consciousness and may develop positive emotions and thoughts, too. Here, sound can be understood as an offer to practice a tradition which implicates an ethical and, hereby, meaningful way of life.

Coming back to the spiritual practice of musical instruments, we learn from the Prophets that by using them, they were able to reach a **different stage of consciousness.** (1. Sam., 19, 24). Basically human beings experience a continuously ongoing interchange of three stages of consciousness, such as 1. conscious awareness, 2. sleep and 3. dreaming. Generally, our brain vibrates, depending on our activity, in certain frequency patterns between 0,5 and 32 Hz. Regarding the **different states of consciousness**, a distinction is drawn between four main ranges:

a) Relaxed concentration, calmness, composed thinking, falling asleep: *alpha rhythm* (frequency from 7 - 14 Hz); *alpha* is the connection between consciousness and sub-consciousness.

b) State of concentration, active attentiveness and intellectual performance: *beta rhythm* (frequency from 14 - 28 Hz) (also aggression, stress, frustration)

c) State of deep sleep, having fainted, very deep meditation, trance, deep state of hypnosis: *delta rhythm* (frequency from 0.4 - 3 Hz)

d) State of creativity, deep meditation, sleep, inspiration and dreaming, visualizing, daydreaming, fantasizing, deep relaxation: *theta rhythm* (frequency from 3,5 - 7 Hz)

(Guenter Haffelder, Physicist and Psychologist, Institute of Communication and Brain Science, Stuttgart, Germany)

During an individually applied **Sound Resonance**, a person usually reaches a state from light (*alpha*) up to deep (*theta*) relaxation, similar to reactions on Autogenic Training, Yoga, Tai Chi and Meditation. (**Herkert, Academic Lecture**)

Human beings can suddenly **change their mood** while hearing a specific sound, a voice or music that touches them **emotionally or spiritually** and which reminds them of certain experiences. Sounds can cause **associations with previous experiences**, in case one listens to something similar. In other words, an association like that would not be possible through memorization only. One can understand from here, that *via* the **Sound Resonance Method** it might be possible to have **access to deeper emotional and spiritual layers** of human experience.

Hearing offers a special opportunity of perception to the human being which may connect us to something that usually is not obvious, that is rather hidden. This so called **transcendental perception** is connected with the **identification with something higher**, with the metaphysical. By hearing, a human being may experience and realize his/her reality of life in greater context and, as a consequence, with emotions of freedom, inner touch and lightness. Furthermore, **rhythmic experience of sound and music** can be integrated within the whole human body, too. From here we can understand, that **sound resonance** can lead to inner harmony and, therefore, wellbeing.

The sounds of some musical instruments (i. e. drums, the woods) fade away rather quickly. Therefore, the listener stays in the presence, in the "here and now". The sound of a Therapeutic Bowl, on the contrary, **fades away rather slowly**, in other words, the sound experience continues much longer. In order to be able to listen to the end of the sound, one needs to eavesdrop very carefully and in a rather sensitive way to the continuing sound. A person can observe the transition from sound to silence by playing the therapeutic bowls once and waiting for the sound to subside. This practice can cause a calming effect and may lead to a meditative state of mind and soul.

In addition, a sound may, by fading away slowly, demonstrate **entering into the infinite**, **into eternity.** This eternity can be perceived as endless space which, again, might be an *impetus* to a **transpersonal experience of sound**. Sounds that are slowly fading away, lead the human being into **subtle silence** which might cause a kind of a **state of trance** and, therefore, a **change of consciousness.** The transcending quality of a holding sound can also cause the potential of "newly experiencing" to a person. The human being is invited to allow the sound of silence to enter his/her innermost being of existence. (**Hinterberger, Thilo**) (2017)

Coming back from this spiritual perspective, it can be said that a human being due to his/her daily stresses, needs something very simple, which is **relaxation**; even more so, **Intensive Care Patients** who are exposed to physical, mental and spiritual suffering. They are often exposed to a lack of orientation and life threatening situations and, therefore, being overstimulated by stresses and sensory overload. **Intensive Care Patients** are suffering from acoustic noise and, furthermore, loose their natural rhythm of day and night. They depend on machines and on the support of other people; they have lost their autonomy. All these (high-) stress factors bear consequences for the human being, on his/her physical health and on his/her mental state. Through **Sound Resonance**, being applied in an **Intensive Care** unit, stress symptoms might be reduced because the method relaxes a patient and improves his/her perception. As a consequence, it relaxes the breath; a patient will produce less adrenalin and cortisol.

According to **Gabriele Seidenath**, **Certified Nurse and Sound Resonance Practitioner**, **HELIOS Amper-Klinikum**, **Muenchen-D.**, **Germany**, it is necessary to make a person relax in order to wean him/her easier from a **respiratory machine**. Based on her research (since 2012), she documents that 70 % of patients under observation show improvement in various ways, such as improvement of breath frequency, volume of breath (CPAP), blood pressure, heart frequency and oxygen saturation. It is possible, for example, to apply **Sound Resonance** by building a so called *Sound Room*, in other words, by placing the appropriate Therapeutic Bowls next to the body of a person into his/her bed. As a consequence, the patient may eavesdrop and feel the soothing sound waves while disturbing and stressful noises of the surrounding will disappear into the background. The patient might calm down and fall asleep. (Seidenath, Gabriele) (12 - 15)



Gabriele Seidenath, Intensive Care (Respiratory Unit), HELIOS Amper-Klinikum, Muenchen-D., PHI Archives, 2015

Eva A. Nerger-Bargellini, Lecturer for Communication and Sound Resonance Practitioner, Hospital St. Bernward, Hildesheim, Germany, has been dedicating her work to promote the **senses** of her patients as well as their **perception.** She supports people with **physical and mental disabilities;** some of them require special attention due to **brain diseases, strong disturbances of development,** others are in a state of **coma.** According to her experience, the patients react in a non-verbal way with a rather relaxed expression on their faces, through a "smile", a flow of saliva or a tear. (**Nerger-Bargellini**) (64 – 67)

A big request of the *Sound Resonance Method* is being made in **Palliative Care**, either in the **Pre-Final** or during the **Final Phase**. Often the process of dying is being supported by sounds: one old lady, for example, had suffered from high blood pressure for months and, as a consequence, from a sudden bleeding in her brain. Her chances of survival were rather low. While being unconscious, she received *Morphium* in order to reduce her pain. The medical team claimed, due to the medication, that she would not sense anything. The family, on the contrary, perceived her mother to be under stress due to her rather strong breath, her reddened face etc.

The Sound Resonance Practitioner placed various Therapeutic Bowls at specific places in the bed of the lady in **Palliative Care**, by playing the bowls and "enveloping" the patient with the sounds. As she continued to do so, she created very pleasant sounds and, therefore, a **protective atmosphere**. As a consequence, the breath of the old lady seemed to calm down until the gaps of her breath widened more and more. The lady made a more relaxed and quiet impression and had started, according to her family, to let go...

When the hand of the old lady was being held by her loved ones, her stress symptoms returned for a while. However, the Sound Resonance Practitioner, according to the wish of the family, continued patiently playing the Therapeutic Bowls during the **Final Phase**, until the old lady could take her last breath. (Seidenath, Gabriele) (76 - 78)

In **Geriatric Care** people often sit in wheel chairs and are rather limited in their movements. Here it can be helpful to use **Mobile Sound Resonance** while the patient is in a sitting position. One might build a so called *Sound Triangle*, meaning, placing Therapeutic Bowls around the person and playing toward him/her, or by creating a so called *Sound Pyramid*, meaning by placing and holding various Therapeutic Bowls around the person and stimulating various parts of the body, such as the neck, the shoulders or the arms. Depending on the cognitive level of a patient, one may introduce *Guided Imagery* by playing the Therapeutic Bowls. Sometimes a deep breath can already be a sign of regaining inner silence. (**Hess, Peter**) (42 - 45)

One might, for example, call a patient who is suffering from **Demenz**, by his/her name and introduce a Therapeutic Bowl by touching and holding it. The person might react by listening to the sound or by feeling the sound waves, the vibration, by placing, for example, the Therapeutic Bowl on the leg while sitting in a wheel chair. There might be eye contact, and the patient might smile because the sound waves might cause emotions of basic trust, safety and security.

One can feel the vibration of the Therapeutic Bowl by touching a popped up balloon and holding it with one's fingers into the bowl. In addition, it is an option to fill a Therapeutic Bowl with water and then play it strongly so that a patient can feel the sound vibration in a very refreshing way. There might be laughter.



Mobile Sound Resonance, PHI Archives 2015.

Sound Fountain



Mobile Sound Resonance, PHI Archives, 2015.

(In order to prevent direct touch, if necessary, one might place a silk cloth o. s. between the hands.)

As therapeutically trained specialists pay more and more attention to the Sound *Resonance Method*, it has been complementing and accompanying conventional medical interventions and therapies, as well. **Dr. N. N. Gloeckner, Head of the Geronto-Psychiatric Department, Clinic Berlin-Jerichow, Germany,** has been integrating *Sound Resonance* since 2010 into their treatments. As a consequence, patients of Psychiatry, Psychotherapy, Psychosomatic Medicine, Neurology and Special Pain Therapy have been benefitting from the method. Feeling under stress and being exposed to tremendous pressure, they often cannot perceive their bodies. Here the *Sound Resonance Method* offers a way *to be in touch without touching*.

Furthermore, **Christian Scholz, Director of the Klinikum Westfalen, Luenen, Germany,** has been reporting similar positive experiences through the *Sound Resonance Method* within the field of Special Pain Therapy. As a consequence, **Dr. N. N. Sauer, Head of Anesthetics,** introduced the project *Surgery without fear;* while waiting for their surgery, patients have been offered various ways of *Sound Resonance* in order to calm them down.

In addition, **Baerbel Kirst, Music Therapist and Sound Resonance Practitioner**, **Psychosomatic Clinic Medical Park Chiemseeblick, Germany,** has been applying *Sound Resonance* within the field of depression and burn out. During her work she emphasizes positive aspects of her patients and encourages them to find strength and motivation through their resources. (Koller, Christina M.) (6-7) (28-29)

Professor Dr. Stephan Volk, Psychiatrist, Neurologist and Psychotherapist, and Lilo Bako, Physiotherapist and Certified Sound Resonance Practitioner, Klinikum Hofheim, Germany, have been applying *Sound Resonance* for app. 7 years as an accompanying method. App. 80 % of hospitalized patients suffer from various kinds of depressions, app. 10 % suffer from fears while the remaining 10 % are distributed on other psychiatric diagnoses. The clinic offers individual and group-oriented Psychotherapy and alternative methods, too, such as Feldenkrais, Biofeedback, various methods of relaxation. *Sound Therapy* is part of the therapeutic *spectrum*, which is being offered in the *clinicum*.

Depending on the actual mood of a patient and his/her tension, the **Monochord**, which is **rich of overtones**, is appropriate to introduce a Therapeutic Bowl. The Therapeutic Bowl sometimes might be filled with water while contemplating it, or by feeling the cooling consistence of the water and listening to the sound of ocean waves by playing it. These non-verbal ways of communication can mirror the actual mood of a patient and may give access to his/her innermost.

When a patient rests on a therapeutic bed in a quiet room, the sound waves may extend slowly but steadily in the whole body while the Therapeutic Bowls are sensitively and softly being played. Applying the *Sound Resonance Method* usually takes app. 50 min. incl. an introductory dialogue and a dialogue to finish the meeting.

N. N., for example, got diagnosed with a depressed mood, being nervous and tense and suffering from difficulties to fall asleep or to sleep through. She has been treated in hospital *via* Behavioral Therapy so that she could improve her feelings of self-esteem and to reduce her stress symptoms.

However, whenever she was supposed to receive her Behavioral Therapy, she arrived in a rather tense way. Therefore, she was offered *Sound Resonance*. App. one week after having received the *Sound Resonance*, N. N. claimed to be more relaxed, meaning, she would feel "relieved"; as if "inner knots had been opened".

After the continuation of both, regular treatments of Behavioral Therapy <u>and</u> *Sound Resonance*, for app. 1/4 year, the patient did not suffer from any symptoms any more. As a consequence, the patient did not need to use up the remaining therapy hours that had been approved by the national health insurance; in other words, one might assume that the appliance of *Sound Resonance* fastened the health process.

From all above mentioned explanations and examples, we may understand that the *Sound Resonance Method* may easily serve patients to enjoy sounds, sound waves and relaxation without any analysis. They might develop new goals and face changes without any criticism; they can have different thoughts than usual and can simply be themselves, on a physical, emotional and, also, on a spiritual level. In **Spiritual Care** patients are *being accepted the way they are*. From here we may learn, that the *Sound Resonance Method* is suitable as a complementary method to professional Spiritual Care.

Even though patients may not be able to communicate with a Spiritual Care Giver verbally, we now can clearly see that the **scientific method of Sound Resonance** can create a **non-verbal contact** through its rather complex effect of **acoustic perception** (*via* hearing) and **tactile sense** (*via* touch). As a consequence, a patient is being touched from a physical, emotional and a spiritual point of view.

In addition, we can understand now, that a limited cognitive level of a person **does not compromise on the effects** of *Sound Resonance* because the human body mainly consists of **water**; water is being used as a **medium for the spread of sound and vibration** and, furthermore, it implicates the **original movement of convex-concave**.

The world had been created from **chaos**, which later on was turned into an **order**, **based on waters and sound**. From this original perspective and from the scriptures, we *may* understand that the Creator Himself was active in the sound process by *hovering* on the surface of the waters.

From an anthropological and a spiritual point of view, alike, sound has always been useful and meaningful for mankind. Human beings have been expressing themselves to the deepest level *via* creating sounds and manufacturing and playing musical instruments, often used for ritual and devotional purposes, as we can clearly see from various scriptures, i. e. from the Psalms (*Sefer Tehilim*). Various states of higher consciousness with transcendental character have been obtained by mankind through the means of **sounds**, trying to still their thrive toward the metaphysical.

Nowadays we are privileged to nourish patients who are suffering from various diseases, through professionally applied sounds and vibrations with the humble hope to ease their suffering. May it be our honor to face the challenge.

Jerusalem, August 2019

Rachel Bardach, SCG-C

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Water (Emoto, Masaru) (34)

"Water has a memory and carries within it our thoughts and prayers. As you yourself are water, no matter where you are, your prayers will be carried to the rest of the world."

Dr. Masaru Emoto, Japan