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Magical Language and Hypnotic Man-Tra-nce

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Abstract

This article extends previous work in attempting to ground modern therapeutic wizardry in a historical and cultural context in terms of magical and religious practices, with particular reference to mantra meditation. It makes a link between these ancient “esoteric” ideas and current scientific understandings of brainwave entrainment, and shows how each of these in its own context uses the inherent power of sound and language to create and manipulate psychic experiences ranging from nightmarish visions, to religious ecstasy, to incredible self-awareness, to deeply peaceful, healing coma. We see that whereas the ages-old practices, rooted in mysticism and steeped in tradition, seem to engender “blissful” mental and healthful, healing physical states, caution should be exercised in technologically and unnaturally “forcing” the trance-states, if physical and psychic well-being are to be preserved. Modern hypnotherapy seeks to steer a course between the mystical and the scientific realm, by acknowledging its roots in the former, and properly understanding and utilizing tools from the latter. We emphasize the Lacanian “linguistic” approach to the subconscious, and claim that a subtle combination of hypnosis and the Neuro-linguistic Programming “mantra meta-strategy,” of modern communication theory can engender “magical” creativity, change and development – and that it does this so successfully by disrupting the entrainment of brainwaves in deleterious, “ironic” and “self-referential,” conscious psycho-chaotic-semiotic states, and allowing them to evolve into dynamic, creative, unconscious patterns.

Keywords

Altered state, brainwave, entrainment, healing, hypnosis, mantra, meditation, Neuro-linguistic Programming (NLP), Psycho-chaotic Semiotics (PCS), religion, ritual, synchronization, trance.

U Kahain i Lizaa Thrufthror hýl

[Litany of Eyes and Voices]

Adonai Sabaoth! *Azlanayfrith i Alefthil!*

Eyes in a plunging avocado grove have voices,
Fragrancing sliced moistness, as
Cloaked with birds, branches sing:
*Let thine ears be attentive
To the voice of my supplication.*

Preserve us from businessmen who drink our wine:
For thine is the earth and its fullness,

Counsel the ploughman who turns our earth:
The earth and all its peoples,

Revive the earth in its oceans:
In wonder, and beauty, and power,

So flux and flow and change of state,
Stars' breath wreathing like a cloak:

Shall never time and seasons' tide negate

And depth springs of still night:

Depth springs of still night –

Nourish with tears the Lebanon Cedar,
Its neverfading leaves, seeds full of song,
Still full of sap, still green, still great:

No sear of toil, no blear of trade, negate

When, between trees it grows old, and strong:

In soil that bears no hate

On the Mountain high.

And now, near the grove, springing the gulf

A drove of mountain deer

Yearns for a running stream;

Here no speech, no sound, no word is heard:

Yet there are voices.

Enthië 'Vrith! *alleluia!*

Recent work [1] has investigated in detail the complementary relationships between religion, myth, magic and science, and the essential link of these to language [2] – [6]. In particular the “Presuppositions” or “Mantras” of Neuro-linguistic Programming have been described as “a different tongue” for describing and changing human thought and behaviour, albeit utilizing a language of which we might not be consciously aware [7]. Herein was put forward the idea of therapy as a “dialogue” between polarized opposites – the necessary impossibility of communication between the conscious and unconscious; the exclusion and allure of a strange language; the scientific and the artistic; knowledge and experience; knowing and wondering; assuredness and inarticulacy. And here we saw that these Mantras for personal growth fall into one of two broad categories – either that of state or of process – and that in terms of personal growth and change, requisite variety is all-embracing, in order to escape the tyranny of content and allow action to unfold. The present article aims at contextualizing psychotherapy, and particularly hypnotherapy, within this framework. This does not mean that I am attempting to say that hypnotherapy is, or should be, in any sense “religious” or include a necessary “spiritual” dimension – but rather than a proper understanding of the religious and magical traditions of other cultures which utilize trance in an insightful, transformative way, can be highly beneficial to the therapeutic “magician,” and give much greater insight into novel modern approaches and applications. Further work by Stevens [8] also explores magical ideas and their relation to modern complementary medicine. The purpose of the current work is to extend these ideas and make a link between psychotherapeutic practice (and particularly hypnotherapy) and the “eternal golden braid” [9] of “mascirelgic” (religion-magic-science) as discussed in [1].

We start then, with a discussion of belief systems which claim that we can indeed learn to “write, rewrite, reshape, appropriate, refigure” our existence [10], and which seek to unite consciousness with “the One,” in different fashions. Buddhism, for example, whilst acknowledging the existence of deities, is essentially non-theistic. Buddha advocated no worship or prayer, but rather the practice of meditation and scriptural study [11]. Meditation is accomplished by means of a mantra, derived from the Sanskrit *manas* – ‘mind,’ and *tra* - ‘deliver’ [12]. We read that “In the World Book Dictionary, the meaning ascribed to Mantras is: A prayer or Invocation, sometimes held to have magical power” [13]. In fact “In mainstream Vedic practices, most Buddhist techniques and classical Hinduism, mantra is viewed as a necessity for spiritual advancement and high attainment ... Clearly, there is a reason why such widely divergent sources of religious wisdom as the Vedas, the New Testament and the Dalai Lama speak in common ideas” [12], which we investigate in detail below. So in a general philosophical, mystical, and spiritual sense, what is the power behind mantra? We find that “Mantra, literally meaning ‘voice’ or ‘sound’ in the Hindustani language of India, is the attachment of spiritual power to certain types of sounds. It is believed that certain sounds and words have power and that the use of these in prescribed ways produces inevitable results” [14]. Now “The Gayatri mantra is Hinduism’s most representative prayer. Hindus recite it on a

daily basis, not only contemplating its straightforward meaning, but also dwelling and imbibing its sound, regarded to be pregnant with spiritual meaning. For this reason nearly all Hindu prayers and mantras are sung” [11]. So the mantra itself is derived from sacred words or syllables: in the context of all our previous discussion on magic and therapy we can now ask: How do mantras gain their power? And the answer is that “As symbols, sounds are seen to effect what they symbolise. Vocal sounds are frequently thought of as having magical powers, or even of representing the words, or speech of God. Aum (Om) is the basic mantra of all Sanskrit mantras. It refers to A(jagrat), U(swapna), and M(sushupti). The three regions refer to the three planes of existence, physical, astral and casual. The silence which follows each utterance of Aum suggests the state of Absolute Being, or Brahman, which is the source and end of everything” [11]. We read that “Om, the first and last letters of the Indian alphabet, is believed to be the condensation of all power. It was understood as the first sound that Brahma made when he came into the universe ... [15]” [14]. Moreover “It is believed that the vibrating sound of the ‘Om’ encompasses the Universe. Sages claim that if one chants it continuously with a certain technique then one can be put in tune with the Cosmos. Almost all other Sanskrit Mantras start with the word ‘Om’. It is almost like the word ‘Om’ makes the prayer come alive” [13]. This is because words and their sounds can be thought of as harnessing the creative power of the Universe, and “... the nature of consciousness is – in it [the sound]; and eurythmy is – the art of cognition; here thought flows into the heart; and the heart speaks without words...” [16]. Thus “The slow, sustained concentration on these passages drives them deep into our minds; and whatever we drive deep into consciousness, that we become” [17]. Furthermore, “The equivalent of ‘Om’ in English is ‘I Am’. ‘I AM’ is the shortest and the most powerful sentence in the English language. Since there is magic in the vibrational content of the word ‘Om’ and/or ‘I Am’ One must not to use any negative word after it ... [for example] One must not say I am sick, poor, lonely, afraid, etc. If one must, use the suffix [sic] ‘I feel...’” [13]. Other mantras are derived from the names of deities, like “[aim], [aing], [hirin], [hiring], [ing], [inga], [kirin], [kiring], [shiam], [shيام], [shirin], [shiring]” [18]. There are five basic types of mantra which we can classify thus: “Those that work simply by faith (analogous to applying a Dock leaf to a nettle sting) ... Those that work by association (e.g. the National Anthem) ... Those that work by agreement or covenant (e.g. the Christian ‘This Is My Body,’ which evokes Angelic assistance) ... Those that work by their meaning – repetition gives power to the words impressing upon the mind and mental body. Blessings given by a Priest fall into this category ... Those that work by their sound (without meaning, e.g. Om, the powerful seed mantras)” [19]. Mantra meditation can thus be typified as a set of related processes involving the vocalization (or subvocalization) of energetic vibrations, leading to the attainment of specific physical and mental states. Here we note that “subvocalization” refers to the mental process of “thinking” the mantra, as one might imagine experiencing an internal dialogue, or “hearing” a piece of music “in one’s head” – we will return below to the mode of operation of a mantra based on true external vocalization and thus emerging from, and bringing forth energetic vibrations; or alternatively as an (electrical)

thought-pattern or “brainwave” which leads to such energetic vibrational states. We have considered so far the origin of these practices in Eastern religio-philosophical teachings and common mantras in Hindu are: “*Om Tat Sat* (Thou art the Inexpressible Absolute Reality) ... *Hari Om Tat Sat* (Om, the Divine Absolute Reality) ... *Om Sri Rama Jaya Rama Jaya Rama* (Victory for the Spiritual Self) ... *Yesu Christu* (Jesus Christ in Hindi) ... *Tat Twam Asi* (that and This of One) ... *Sat Nam* (mantra of Sikhs and Guru Nanak) ... *Eck Ong Kar Sat Nam Siri Wha Guru* (The Supreme is One, His Names are Many) ... *Aham Brahmasmi* (I Am Brahman or I Am God)” [19]. Such practices are not restricted to Eastern religious observance, however: hymns, chants and prayers are effectively used in all religious settings. For example, the Ancient Egyptians used “*Nuk-Pu-Nuk* (I Am He I Am) ... *Au-U Ur-Se-Ur Au-U* (I Am the Great One, Son of the Great One, I Am) ... *Ra-Neter-Atef-Nefer* (The Divine God, Ra is Gracious) ... *Nefer-Neter-Wed-Neh* (The Perfect God Grants Life) ... *Erta-Na-Hekau-Apen-Ast* (May I be given the words of power of Isis) ... *Heru-Udjat* (Eye of Horus)” [19] in their rites. In the Jewish tradition, we find mantras such as: “*Eh Hay Eh*, or *Ehyeh Asher Ehyeh* (I Am that I Am) ... *Ha Sham* (the name) ... *Sh'Mah Yisrael Adonai Elohainu Adonai Chad* (Hear, oh Israel! The Lord our God, the Lord is One!) ... *Qadosh, Qadosh, Qadosh, Adonai Tzeba'oth* (Holy, Holy, Holy is the Lord God of Hosts) ... *Eli Eli* (My God, My God) ... *Ribono Shel Olam* (Lord of the Universe)” [19]. Islam proclaims “*Allahu Akbar* (God is Great) ... *Bismillah Al-Rahman, Al-Rahim* (In the name of Allah, the Compassionate, the Merciful) ... *Ya-Rahman* (God, the Beneficent)” [19]. Christian worship brings forth “Jesus Christ ... God, Christ, Holy Spirit ... Our Father, Who art in heaven, Hallowed by Thy name ... Hail Mary, Full of Grace! The Lord is with Thee ...” [19].

Having investigated the form of expression of various mantras, it is useful now to address the philosophical basis and “meaning” of mantra meditation – and in fact this might best be done in terms of a discussion of what it is *not*. So we read, for example, that meditation is not concentration, but one of many forms of concentration, and that “When you concentrate, you constantly project your attention towards a particular task or activity whereas in Meditation you do not project your attention towards a particular task or activities. You just remain aware of the moment without choosing anything to concentrate upon. Concentration is important for learning meditation. It will greatly help you (particularly in the initial phase) in learning mediation. However, it is not Meditation” [20]. Moreover, meditation is not simply relaxation, since we can ask “What does relaxation do? It relaxes you, makes you calm, gives a sense of serenity and rejuvenates you. Meditation also makes you relaxed. But Meditation is *not* Relaxation. When you meditate ... its natural outcome is relaxation” [20]. We should also be careful to differentiate meditation from serious religious practice, since “Meditation is not a specific ritual demanding sitting in a particular posture, chanting some specific Mantras (powerful words having phonetic significance) or burning incense. Neither it means doing a particular exercise in a particular pose. Meditation is a quality of our existence. When you are aware of your true 'self' and perform anything ... with awareness, it becomes meditation” [20].

This statement holds even though “It is true that it takes some time to learn Meditation and it requires some genuine effort on the part of seeker to learn meditation, but it does not mean that Meditation is connected with any specific religion or ritual. Anybody, irrespective of his background, religion, caste, creed or nationality can do it. Meditation is not even a serious thing. One you understand it, it will be a pure fun to meditate” [20]. In the most general sense we must take care to understand that meditation is not a state of mind, but rather a state of “*no mind*” and in terms of brainwaves “ ... This (alpha) state is often known as the state of Meditation. Gamma and Theta are the other states of mind in further depth ... In the alpha state one become still, tranquil and calm. There is no tension, no stress. Your whole inner being becomes peaceful. But please note that alpha state itself is not meditation. Alpha is the *state of mind* in meditation. Meditation is the awareness of our true self in alpha. You will be in meditation if you remain awoken and aware of the present moment in the alpha state of mind i.e. in the state of absolute calm” [20]. And there’s a link to our later discussion of hypnosis and therapy, since we are reminded that meditation is not self-hypnosis, since “In both Self-hypnosis and (in many techniques of) meditation at least an initial period of concentration on an object is required. However in meditation, the meditator maintains an awareness of here-and-now and stays conscious of the meditative process which is not exactly the case in hypnosis. In hypnosis the person enters into a state of semi-conscious trance and become unaware of the moment which is not the case in meditation” [20]. We can go even further than this and state that meditation is not thinking, “Rather it is the process of transcending the thought process. Our mind is a non-stop chatterbox that continues to create all sorts of good / bad, relevant / irrelevant thoughts incessantly. In meditation we realize that we are not just our body and mind. There exists in us an awareness independent of all kinds of thoughts. Knowing this awareness is what meditation is all about” [20]. So, let’s now turn to the positive questions posed by meditative practice, such as: “What is self? It is the pure awareness of ‘I am’, the original ‘I’ consciousness which has been within us ever since we come into this world. Even though that ‘I’ exist in the woman, it is not a woman, even though it exist in a man, it is not a man. That ‘I’ is without form, colour or any other attribute. We have superimposed different notions onto it – notions like ‘I am a man / woman / an American / an Indian’. But when we wipe them all away that ‘I’ is nothing but pure consciousness,” and so “In reality you are just consciousness. You are not body, you are not mind, you are not thoughts, you are just consciousness which feels and witness everything as you play your part in life. This consciousness by its very nature is peaceful, calm and rejuvenating. And Meditation is a process to know this consciousness within you” [20]. There is a link here to the classical idea of conscious-subconscious duality, however, since the meditator realizes that “In the course of any single day we are subjected to numerous sensory inputs and our mind is constantly engaged in a never ending process of thinking. We read the newspaper, study books, write reports, engage in conversation and meetings, solve problems, etc and all these activities result in a constant mental commentary inside us. Seldom or never our mind gets any chance to be still and calm” [20], and yet, “However, sometimes as if by accident most of

us attain a state of thought-free mind. If you have relaxed looking at a beautiful sunset, allowing your thoughts to quiet down, this is close to meditation. If you have been reading a book for awhile, then put it down to take a break and just sat there quietly and peacefully for a few minutes without thinking, this is also close to meditation. In these momentary incidents when our mind is not reflexively engaged in any thought, when we are just present in the moment, we come close to this self ... we get centered in our self. And this contact with self brings peace, bliss and joy. Though only for a moment, our mind becomes peaceful, calm and focused" [20]. The bounty of this "centering" for the meditator is that "To be centered in our self makes us calm, provides us an everlasting peace and gives us a never ending bliss. Moreover there comes a dramatic change in the way we perceive this world. A positive change in our perspective, a feeling of blissful calm and a unique joy comes through it. Moreover these positive outcomes do not depend upon any external circumstances since the bliss of the Self does not depend on any external factor. It is completely independent and arises, unconditionally, from within" [20]. Thus we can summarize by saying that to the modern practitioner of mantra meditation, "Meditation is the systematic way to achieve the above mentioned accidental / occasional encounters with self in order to get its benefits on a permanent basis" [20] – and that "Meditation is a systematic way of making our mind quiet so that we can contact our true identity-self, which is the source of everlasting joy, bliss and peace" [20]. In terms of the more philosophical approach to this practice, then "Meditation is a state of choiceless awareness – Meditation is a state of no mind – Meditation is a state of once being when once true self is revealed to him / her – The state of awareness when mind cease to exist is meditation – Whenever you are relaxed, when your mind is quiet and observant, when you are not reflexively engaged in any thought: you are meditating – Meditation is not thinking about anything. It is not contemplation. It is not concentration. In fact, it is actually a process of thought removal" [20]. And in terms of achieving the "bliss" of "centeredness" then "Meditation makes us aware of the fact that we are intelligent ... The foundation of self awareness that meditation provides is useful in many areas ... It develops insight into the unconscious causal connections between thoughts, attitudes, perceptions, feelings, body states, and behaviors ... Your attitude towards life will change ... You will be able to see the larger picture of things ... Meditation helps us accept the things as they are not as we desire them to be ... You will be more understanding towards others ... You will start ignoring petty issues ... Your inner ability to solve complex problems will increase ... It is a healthy way to handle stress ... Meditation increases concentration, self-esteem, spontaneity, creativity, and depth of awareness" [20]. And despite the fact that the meditation practitioner is at pains to explain that this activity is different from hypnosis, nevertheless, successful hypnotherapy can still *result* in very much these same outcomes.

Having seen some examples of mantra, and discussed its philosophical underpinnings, let us now address its conceived mode of operation. First we recognize that the act of vocalization (speaking, singing, humming, and so on) produces vibrations which have a physical effect:

other individuals can hear and interpret these as speech or music, for example; moreover, some vibrations are unpleasant, or noisesome; and some notes can even shatter glass! Thus the “energy-basis” of the mantra imparts a further “meaning” to the words [12]. In terms of measurable physical phenomena: “It is said that that the wavelength (or maybe half-wavelength) of Om is 7.23 cm, the average length across the palm – this would put the frequency at about 4.2 GHz. Microwave ovens work at around 2.45 GHz, as this is an ideal frequency for heating water (which is how microwave ovens work), water comprising 80% of the human body. Some frequencies in the lower GigaHertz region are absorbed by atmospheric precipitation ([and this absorption] causes communication difficulties)” [19]. Let’s suggest a metaphor to try and explain this concept of “vibration energy” – “If we warn a young child that it should not touch a hot stove, we try to explain that it will burn the child. However, language is insufficient to convey the experience. Only the act of touching the stove and being burned will adequately define the words ‘hot’ and ‘burn’ in the context of ‘stove.’ Essentially, there is no real direct translation of the experience of being burned ... It is the same with mantras. The only true definition is the experience which it ultimately creates in the sayer” [12]. Another way of thinking of this is that mantra represents “a perfectly natural language, for all the affections of the mind, whatever they are, and all the ideas of a thing, whatever they are, have their corresponding affection in the body, which cannot be described; for they affect the body and its various parts as all affections are wont to do. These affections with man, raise the breast, contract and dilate the lungs, cause freedom or difficulty of breathing; or also contract or dilate the belly, or affect the lower part, as also the face and eyes. Such corresponding affections are felt manifestly in the bodies of spirits and Angels; and when they speak, they enunciate the words articulately, according to their sensation of those affections. Thus their speech and affections make one” [21]. Thus “Over thousands of years, many sayers have had common experiences and passed them on to the next generation. Through this tradition, a context of experiential definition has been created” [12]. So “Each mantra is associated with an actual sage or historical person who once lived ... This means that the mantra was probably arrived at through some form of meditation or intuition and subsequently tested by the person who first encountered it” [12]. In utilizing a mantra one couples a specific “energy-basis” with an “intention,” and this coupling influences the result of the mantra. We could describe this by saying that “The sound is the carrier wave and the intent is overlaid upon the wave form, just as a colored gel influences the appearance and effect of a white light” [12]. We can summarize this with the statement that the “only lasting definition is the result or effect of saying the mantra” [12]. Now, we can imagine human consciousness as a gestalt composed of many “parts” or “states,” as in the Neuro-linguistic programming description of the mind [22] – [25], and thus “there are myriad vibrations riding in and through the subconscious mind at any given time” [12]. These vibrations are distributed “holographically” throughout the “physical and subtle” bodies [12], so that “Each organ has a primitive consciousness of its own ... individual organ consciousness is overlaid by system consciousness, overlaid again by subtle body counterparts and consciousness, and so ad

infinitum” [12]. Freud’s ego state “with its self-defined ‘I’ ness assumes a pre-eminent state among the subtle din of random, semi-conscious thoughts” [12] – we thus act as “antennae” for vibrations arising from external sources, and become “attuned” with them, since “there is a direct relationship between the mantra sound, either vocalized or subvocalized, and the chakras located throughout the body” [12]. And once again we are with Adam and Eve and their pronouns, the tempting Snake, and the mute but sentient creatures in the Garden [2], [4].

As discussed above, the mantra can be thought of as generating a powerful vibration on a particular “spiritual” energy frequency. This is the “seed” for a new, special, state of consciousness, which eventually harmonizes, overrides and absorbs all other vibrations leading to a profound change in state. Ashley-Ferrand sums the process up thus: “After a length of time which varies from individual to individual, the great wave of the mantra stills all other vibrations. Ultimately, the mantra produces a state where the organism vibrates at the rate completely in tune with the energy and spiritual state represented by and contained within the mantra. At this point, a change of state occurs in the organism. The organism becomes subtly different. Just as a laser is light which is coherent in a new way, the person who becomes one with the state produced by the mantra is also coherent in a way which did not exist prior to the conscious undertaking of repetition of the mantra” [12]. This process of attuning is what we mean when we read that “... the word mantra in its most literal sense means ‘to free from the mind.’ Mantra is, at its core, a tool used by the mind which eventually frees one from the vagaries of the mind” [12]. And have we not recovered “themes of music” which give birth to “deeper understanding” when the whole composition “shall be played aright”? [26]. Chanting a mantra is a “purifying” process and we are told: “*Kabeer man nirmal bhayo jaise Ganga neer Peechhey peechhey Hari phirey kahat Kabeer Kabeer*’ Which means that ‘My mind has become as pure as the waters of the Ganga, hence now the Lord follows me chanting my name!’” [13]. Some mantras are sounds which have no simple translation, but nevertheless invoke very potent vibrations: these are called “seed mantras” (*bija(m)* in Sanskrit). For example: “The mantra ‘Shrim’ or Shreem is the seed sound for the principle of abundance (Lakshmi, in the Hindu Pantheon.) If one says ‘shrim’ a hundred times, a certain increase in the potentiality of the sayer to accumulate abundance is achieved. If one says ‘shrim’ a thousand times or a million, the result is correspondingly greater” [12]. However “It is at this point that the intention of the sayer begins to influence the degree of the kind of capacity for accumulating wealth which may accrue” [12]. For of course “... abundance can take many forms. There is prosperity, to be sure, but there is also peace as abundance, health as wealth, friends as wealth, enough food to eat as wealth, and a host of other kinds and types of abundance which may vary from individual to individual and culture to culture” [12]. Like magic, it can be said that “I believe ... [mantras] work even if one does not understand the meaning. However understanding them, and/or chanting them correctly makes them more effective as one is then able to infuse more feeling into it” [13]. It is recommended that mantra chanting be finished by saying “*Om Shanti Shanti Shantih*” – “I am

Peace, Peace, Peace” [13]. Moreover, mantra meditation energizes “prana” – “a Sanskrit term for a form of life energy which can be transferred from individual to individual” [12]. Mantras are intrinsically powerful however, and must be used with caution, since, to invoke another metaphor of *agni* (‘fire’): “You can use fire either to cook your lunch or to burn down the forest. It is the same fire. Similarly, mantra can bring a positive and beneficial result, or it can produce an energy meltdown when misused or practiced without some guidance” [12].

Meditation practices differ from tradition to tradition. Generally, the meditator might lay down, sit cross-legged, stand, or walk [27]. Using concentration, self-awareness, self-discipline and equanimity, she aims “softly to avoid” random thoughts and fantasies, in an effortless process that calms and focuses the mind. In Samadhi (“concentration”) meditation, practised by Buddhists, Hindus, Mediaeval Christians and Kabbalistic Jews, the mind is focused on an idea, image, sound, person, or word [27]. Today, Easwaran advocates “passage meditation,” using texts from the great religions [28]. In Vipassana (“insight”) meditation, used in Theravada and Zen Buddhism, and the “choiceless awareness” of Krishnamurti, the practitioner acknowledges each bodily perception but does not linger on these, and passes on [27]. Thus Conze identifies this practice with the magical technology of casting a “spell” described previously, as it enables the practitioner to translate her “will” into an action on the external world, by careful practice and repetition [29]. In this way humankind can use its own free will to attain “deliverance from mental suffering” [11], gain experiential insight into the “nature of reality,” and “commune with the Deity” [27]. As Bely says, the practitioner “...is free to meditate for hours ... to hear in the shuddering of the air the imprint of ancient meaning; and by wrapping oneself in the image of muttering by-gones, to resurrect that which has gone by” [16]. Today, Transcendental Meditation, developed by Maharishi Mahesh Yogi, is sold as a set of non-religious techniques for attaining “bliss.” However in this case you buy a personal, secret *mantra*, based on the name of a Hindu deity, which is passed on in an “initiation ceremony” by a “guru” [18]. Modern secular meditation practices are derived from Hindu Tantrism, and a “smooth-sounding,” meaningless, word or syllable, with no associations, is used as a *mantra* to achieve easily, internal focus and “deep relaxation” [18]. Such meditation practices tend to follow a sequence of stages, paralleling those in hypnotherapy [30]. First there is the induction, where one closes the eyes, and then after a couple of minutes’ relaxation, begins speaking the *mantra*, repeating it in a voice that gets lower and lower, until eventually it is whispered, then only thought. Even the thoughts can diminish in intensity! Meditation is self-regulating and as it progresses, breathing becomes flatter and slower, maybe with some deep breaths. The *mantra* may become vague or vanish, and feelings of relaxation and ease increase [30]. During this fifteen-minute meditation, disturbing awarenesses are noted and ignored, and we find: “Soon other thoughts will emerge spontaneously. One should try not to start daydreaming. Thoughts and perceptions are simply allowed to come and go like single, detached events ... The ‘sound’ of the mantra varies. Occasionally it ‘vanishes’” [30]. If this process proves distressing in any way, then it is

stopped, and deep muscle relaxation is attempted. The systematic awakening procedure uses deep breathing, stretching, and ends with opening the eyes. Mantra meditation can be used in healing, since “Some healers operate through transfer of prana. A massage therapist can transfer prana with beneficial effect. Even self-healing can be accomplished by concentrating prana in certain organs, the result of which can be a clearing of the difficulty or condition. For instance, by saying a certain mantra while visualizing an internal organ bathed in light, the specific power of the mantra can become concentrated there with great beneficial effect” [12].

What, then, of the phenomenon we now call “hypnosis” or “trance”? What are the differences? And where does they fit in with magic, mantra and religion? In fact, mystical mesmerism has magnetized mankind for millennia, and it is useful to realize that this state, often identified with a deep sleep or trance, has in fact probably been known for as long as *Homo sapiens* has existed, and has been being recorded for thousands of years. We can easily relate the states elicited by mantra, meditation, and hypnosis, by realizing that “Among the methods of achieving self-induced states of altered consciousness are: Transcendental Meditation ... Yoga, Zen, Subud, Nichiren Sho Shu, Hare Krishna, Scientology, Black Moslemism, self-hypnosis, the ‘relaxation response’ (Benson), and many others. Some of these are, others are not, associated with religious cults, but all of them are strongly enforced by following certain traditions or mystic rites which help to induce a state of altered consciousness in which total relaxation is accompanied by increased mental alertness. The monotonous repetition of certain words, concentration on a single sound, a source of light or even the hypnotist’s eyes help bring about this state, presumably by deflecting attention from disturbing stimuli” [31]. In fact, in terms of all the practices, “The basic elements of such techniques have been known for centuries, usually as religious rituals. We find them in the stereotyped repetition of prescribed prayers of litanies, the obligatory ‘contemplation’ sessions of Carmelite nuns, the mystic contemplation of God’s presence. After a while these become totally mechanical and soothing and thereby also help to cut out all exacting mental or physical activity which might demand adaptation to change or other types of performance that require attention” [31]. We read that “Being in hypnosis is similar to meditating; a deeply relaxing state in which your breathing and heart rate slow down and blood pressure reduces as you become more and more relaxed. In hypnosis you remain conscious throughout. You are able to hear the words of the therapist – conveying guided imagery or visualization – and respond to them” [32]. We shall return to the relationship between meditation practice and hypnosis in detail below. The Ancient Egyptians are thought to have originated the “Sleep Temples,” which “are described in the Ebers Papyrus ... [and] are over three thousand years old. In the temple, the Egyptian priests used a hypnotic-like procedure to improve health. While the subjects were in the hypnotic state, suggestions for healing and health were given by the priest. The temple became so popular and successful that they spread to Greece and throughout Asia Minor [33]” [34]. In 2600 BCE, the father of Chinese medicine, Wong Tai, wrote about techniques

that involved incantations and passes of the hands. Moreover, the Oracles of Ancient Greece are known to have used drugs and volcanic emanations to induce deep trance under which the Oracular priest spoke in riddles, to be interpreted by the fortune-seeker. We read that "The age of the oracles dates from around 700 BC to about 300 AD. The word oracle describes three things. It describes the person through which the god speaks. It also describes the actual temple or shrine of the god. Lastly it describes the answer given by the god through the prophet ... Oracles are but one of several types of divination, which is the art or science of interpreting symbols understood as messages from the gods. Such symbols often require the interpretive expertise of a trained specialist and are frequently based on phenomena of an unpredictable or even trivial nature. The more common types of divination in the Greco-Roman worlds included the casting of lots, the flight and behavior of birds, the behavior of sacrificial animals and the condition of their vital organs, various omens or sounds and dreams ... Oracles were usually associated either with a sacred place where they were a public religious institution or with a person with special powers who worked for himself or someone else" [35]. And we can easily recall here Freud and Jung who realized the importance of "omens or sounds and dreams," of " ... symbols [which] often require the interpretive expertise of a trained specialist and are frequently based on phenomena of an unpredictable or even trivial nature." Similar techniques are also recorded by the Greek physician Hippocrates (430 BCE) who "was aware of the importance of harmony between mind and body, and described the mind as the 'seat of emotion'" [36]: he wrote that "the affliction suffered by the body, the soul sees quite well with the eyes shut" [37]. The semi-mythological Roman, Aesculapius, used "... different natural therapeutic modalities" [38], and often put patients into a "deep sleep" and assuaged pain by stroking the affected area with his hand. In one such case "the patient had a deformation of the hand similar to the disorder which we now know as Dupuytren's contracture. According to the legend, Aesculapius restored the functions of hand by stroking the deformed area. From a modern point of view it seems like one of the most ancient descriptions of soft tissue mobilization in a case of pathology of the connective tissue (i.e., palmar aponeurosis)" [38]. Avicenna (980 – 1037 CE), the great physician, and "the most influential philosopher-scientist of Islam, was famous for his contributions in the fields of Aristotelian Philosophy and Medieval Medicine. He wrote the famous work, the *Kitab ash-shifa'* ('Book of Healing'), an extensive philosophical and scientific encyclopaedia, and *al-Qanun fi at-tibb*, a 'Canon of Medicine,' a classic in the history of medicine" [39]. One of his major philosophico-medical understandings was that, "The imagination can fascinate and modify man's body either making him ill or restoring him to health" [40]. Other "primitive" traditions use "drumming, chanting, psychoactive substances or self-flagellation, but they are all trying to achieve a highly focused god-consciousness" [41]. And so we read of the Vikings: "Seidh trance is primarily used to gain advice and/or prophecy uttered by spirits the practitioner is speaking to, sometimes via channeling or repeating the utterances of a nearby spirit, and sometimes faring forth to the realm of the dead, Hel, to find the spirit. Few elements of ancient techniques to induce the seidh trance have survived into

the present day. The best picture of the ancient ritual is given in the Saga of Erik the Red. It specifies that the practitioner must sit on a raised seat, specifically with a cushion stuffed with hen feathers. The practitioner should wear a costume consisting of as many elements as possible of: a blue cloak ornamented with stones, a necklace of glass beads, a cap of black lambskin lined with white catskin, catskin gloves, and calfskin shoes. A belt supporting a skin pouch of magical paraphernalia and a walrus ivory handled knife, and a carved staff (with runes or other sacred signs) with a brass knob, also set with stones. It is interesting to note that much of the costume includes the skins of the cat, sacred to Freyja. That the practitioner should have a staff is mentioned also in the Lexdaela Saga" [42]. To the Dervish "The fundamental principle was discipline and surrender. The practiced Dervish knows how to die by willfully giving up his soul to Allah. By surrendering to the physical challenges, we attain a connection with *baraka*, or god-energy. The whirling dance is performed with one hand raised to god and the other lowered to the earth. In the sacred turning the Dervish is essentially channeling energy from god to earth in a mystical transformation that is reminiscent of the Christian rite of Communion ... My feeling about extreme practices inducing trance or trance-like states is that they do this by tying up your brain in so many knots you can't really think of anything else" [41]. In the eleventh century, Edward the Confessor (1003 – 1066 CE) is recorded as using a power referred to as "the Royal Touch" to cure individuals simply by touching them. This procedure became so popular that special healing hymns and chants were devised for the Christian liturgy to facilitate the cures, and we read that "St. Edward was the first King of England to touch for the 'king's evil', many sufferers from the disease were cured by him. He was canonized by Alexander III in 1161" [43]. Accounts of what we would now call hypnosis can also be found in the Bible and in the Talmud, covering a historical period of several thousand years BCE, For example we have the passage in Genesis 2:21 – 22 about the creation of Eve: "{21} So the Lord caused a deep sleep to fall upon man, and while he slept took one of his ribs and closed up its place with flesh; {22} and the rib which God took from the man He made into woman and brought her to the man" [44]. We also find the "deep sleep from the LORD" in Samuel 26:12 [44]. Moses' production of water from a rock under God's instruction is "magical" – "and thou shalt smite the rock, and there shall come water out of it that the people may drink." We are told that he does so, "in the sight of the elders of Israel" (Exodus 17:6) [44]. Once again, when battling with Pharaoh's sorcerers (Exodus 8:7) we find: "And the magicians did so with their enchantments, and brought up frogs upon the land of Egypt" [44]. It is interesting to note that many of the miracles could be construed as having used hypnosis or suggestion in their execution: "In the scriptures, disciples healed the sick and cast out demons in the name of Jesus. The crippled man at the Beautiful Gate of the temple was healed in the name of Jesus (Acts 3:1-6). The seven sons of Sceva, non-Christian Jews of Ephesus, invoked the name of Jesus over the demon-possessed (Acts 19:13 – 17)" [14]. Moreover, Jesus cured a man possessed by demons, casting them into the Gadarene swine (Mark 5: 8 – 9): "{8} For he said unto him, Come out of him, thou unclean spirit. {9} And he asked him, What is thy name? And he answered, saying,

My name is Legion: for we are many” [44]. So we are led to ask in a modern religious context – what is the relationship between mantra meditation and prayer practice? We find that “Loewen recounts how a South American Indian interpreted Christianity as a system of *mantras* to manipulate life. ‘It is wonderful to be a Christian,’ he said. ‘Now we have ever so many more “hard” words than before. You can heal your friends, or you can kill your enemies, whenever you want to ... [45]” [14]. However, a rebuttal to this is given from a Christian perspective as follows: “Should such use of the name ‘Jesus’ be considered a mantra? To what extent is there a relationship between the sound of the name and the power of Christ? From a Christian perspective the name should not be understood as having any intrinsic power. Unlike the sound *om*, pronounced similarly in every language, the name of Jesus is an arbitrary symbol pronounced differently in various languages. The New Testament disciples understood that the name Jesus only symbolized the power of God; the name had no power within itself. Healing and casting out of demons was rather based on the reality of the nature and power of Jesus” [14]. A modern religious view of historical trance phenomena can be summarized as follows: “Prophets and apostles entered into trances (for instance, Daniel 2:19 and Acts 11:15), but a prophetic trance is not the same as hypnosis. Hypnosis is something we put ourselves or each other into. The prophetic trance is something that overtakes the prophet or apostle, imposed from God. Deuteronomy 18:10 – 11 speaks against a lot of ways to get altered states of consciousness: sorcery, charms, mediums, spells. But none of these words translate to hypnosis. The passage is talking about practices that assign power and value to pagan gods and occultic personalities. Hypnosis is often used that way by its practitioners, but because it operates through natural processes of the brain, it is not itself occultic. In that way, it is like acupuncture or t’ai chih, something that happens in the natural physical world which the ancients discovered and then used their non-Christian culture’s resources to explain” [46]. It is ironic that religious movements have always made use of hypnotic power, whilst simultaneously suppressing and condemning the use of such practices by other organizations or individuals. In particular, the advent of Christianity as a world religion led to the condemnation of hypnosis and trance healing as witchcraft and this has much to do with the marginalization of such practices, thus adding to their “occult” status. It was during the Middle Ages (roughly 500 – 1500 CE), that suggestion-healing fell into disrepute and became known as “black magic,” and was considered more evil than beneficial. One of the great medical figures of the late Middle Ages was Paracelsus (1493 – 1541 CE) who “During his lifetime ... was called by some the ‘Luther of Medicine’ and the scientific debates of the late sixteenth century were centered more frequently on the innovations of Paracelsus than they were on the heliocentric astronomy of Copernicus” [47]. During this time, however “Paracelsus was persecuted by the Church and hounded from place to place because he publicly stated that the power of the mind could be the cause and also the remedy for many different kinds of illness” [48]. Why should such prejudices have arisen and become so potent? “ ... why do most Christian, Moslem, and Jewish sources get so troubled by hypnosis? The main historical reason is that these living religions encountered hypnosis

through its use by the ancient religions they most despised: Mesopotamians, European pagans, early Arab polytheists, and Canaanites. For those ancient opponent religions, hypnosis was a tool (among other tools) for opening up their minds and spirits to the kind of activities that our modern faiths most opposed, such as sexual obsession, prostitution, war, vengeance, and child sacrifice. It produced little spiritual light or worthwhile action for the time spent with it" [46]. Furthermore, we find that "During the Middle Ages witchcraft and sorcery were always present. However, unparalleled change precipitated by the Renaissance and amplified by the Industrial Revolution and Reformation, created cultural tension so great that the use of witchcraft and sorcery reached epidemic proportions [49]. It is estimated that between 1450 and 1700 a hundred thousand were executed after being accused of witchcraft [50]. Malevolent manifestations of spiritual power increase during times of cultural tension" [14]. Even at the end of the Mediaeval period, the fear and irrationality surrounding trance-healing persisted, and we find that "An estimated 9 million women and girls met death by fire between the years of 1300 and 1700 for practicing witchcraft. In the eighteenth century, 19 suspected witches were killed in Salem, Massachusetts" [51]. And in fact, we still find it said today, by a religious observer, in connection with a "New age" practitioner: "What is witchcraft? It is a supernatural power acquired by contact with evil spirits. It is a power that comes from a psychic force within ... Did these powers of healing come from God? Would God operate this way? No! This man was using his psychic or soul power ... Satan wants to raise that soul power within so that he can manipulate the victims" [52]. So some still seemingly see the slithering scientific Serpent hissing hypnotic horrors: a poisoned apple stuck on the healing caduceus. It is of great interest here in fact, to view religious trance practices through the prism of modern science and medicine, as evidenced by "A team led by Dr Luciano Bernadi, associate professor of internal medicine at Pavia University, [which] studied the effects of repeatedly reciting both the Roman Catholic prayer Ave Maria and a yoga mantra ('om-mane-padme-om'). The Ave Maria is repeated 150 times as an exchange between the priest and the congregation. Each set of 50 repetitions is known as a rosary. A mantra is usually repeated over 100 times during yoga practice" [53]. Now, the underlying physiology of this is that "reciting the Ave Maria prayer and yoga mantras enhances and synchronises inherent cardiovascular rhythms because it slows respiration to almost exactly six respirations per minute, which is essentially the same timing as that of endogenous circulatory rhythms ... The rosary may have partly evolved because it synchronised with the inherent cardiovascular ... rhythms, and thus gave a feeling of well-being, and perhaps an increase [sic] responsiveness to the religious message" [54]. The conclusion of this study was that "The benefits of respiratory exercises to slow respiration in the practice of yoga have long been reported, and mantras may have evolved as a simple device to slow respiration, improve circulation, and induce calm ... The rhythm necessarily imposed by these repetitions induces a fixed respiratory rate at a predetermined frequency. In times when stopwatches and metronomes had still to be invented, a rhythmic formula was the easiest way to keep a reasonably accurate timing in the range of several seconds per breath, and thus a good way

to learn to slow respiration to a given rate, without the need to concentrate of the respiration itself" [54]. Thus "mantra" vocalization leads to physical entrainment of respiration and heartbeat to a certain frequency, thus assisting in engendering particular brainwave states – and we can conjecture that subvocalization leads to unconscious entrainment to certain psycho-chaotic-semiotic states, resulting in specific brainwave patterns, and thus related physical affects. In this context, a more positive modern religious viewpoint is given by Longman, who takes pains to distinguish between "religious" and "therapeutic" uses of trance: "God chooses not to bypass the mental mechanisms that hypnosis bypasses. There are partial exceptions to that (prophetic trances, momentary conversion experiences, and such), but all of those exceptions are partial and very momentary, are done for a specific purpose, and are done to bodily controls rather than the mind. The Spirit does not override or bypass our will, our conscience, or our sense of moral or practical limit; instead, the Spirit works to transform them, transcend them, and work through them. God loves and respects each of us too much to do it differently. If God so rarely does even slight bypasses of these self-control systems, why should we do it as a spiritual practice? Are we out to trick ourselves? Don't we value our freedom? Why would we do what God won't do, and then claim we're following God? Both these objections speak to core matters of faith and practice, and either one would be cause for a Christian to reject hypnosis as a *religious practice*, even just to try it out. Yet, its use as *medicine* is a very different matter, and the Christian is free to utilize hypnosis for those uses. However, if you do go that route, *go to someone who is trained, experienced, and credentialed*" [55]. And so we conclude that in cases of such therapeutic uses of hypnosis there is no need to be "... frightened by the magic which her eyes and her voice exerted upon me" [56], as one would have been if faced with a wily, wizened witch.

Now having discussed the basis, philosophy and outcomes of mantra meditation practice, and introduced the background to the phenomenon of trance, let us turn now to the modern "scientific" viewpoint on both of these. First we should be mindful that "The brain is an electrochemical organ; researchers have speculated that a fully functioning brain can generate as much as 10 watts of electrical power. Other more conservative investigators calculate that if all 10 billion interconnected nerve cells discharged at one time that a single electrode placed on the human scalp would record something like five millionths to 50 millionths of a volt. If you had enough scalps hooked up you might be able to light a flashlight bulb. Even though this electrical power is very limited, it does occur in very specific ways that are characteristic of the human brain" [57]. This is measurable through "Electroencephalography (EEG) [which] is a study of changing electrical potential of the brain. The apparatus used to measure this electric potential of the brain is called electroencephalograph, and the tracing or the printout of the measured brainwave forms is electroencephalogram" [58]. Now, this is linked to thought and emotion in the following way, for "If you are in a particular state, for example, very anxious, then you will produce a unique 'signature' of brainwaves. This applies equally to other states, such as learning and the

focused concentration of competitive sport. These are states that can take a long time and a lot of physical effort to attain. It is an appealing idea that all that hard work and application could be bypassed and the perfect mental state produced through rapid artificial means” [59]. An extremely detailed analysis of “brainwaves” by frequency, together with their correspondences to mental states, physiology, colours, notes and planets is given in [60]. The “pseudo-drug” effects of various brainwaves, as taken from [61] is detailed in Table 1.

Table 1: Pseudo-drug effects of various brainwaves

<i>mimics effect</i>	Delta	Theta	Alpha	Beta
adaptogenic			X	
analgesic	X	X	X	
anaphrodisiac	X	X		X
anaesthetic	X	X		
antianxiety		X	X	
antidepressant			X	
antispasmodic			X	
antipsychotic			X	
aphrodisiac			X	
bittertasting			X	
cardiotonic			X	
circulostimulant			X	
depressant	X	X		
diaphoretic		X		
hallucinogenic		X		
hypertensive				X
hypnotic	X	X	X	
hypotensive	X	X	X	
mydriatic	X	X		
narcotic	X	X	X	
nervine	X	X	X	
photosensitive			X	
rubefacient			X	
sedative	X	X		
spasmolytic	X	X	X	
stimulant				X
vasoconstrictor				X
vasodilator			X	

We can now present a summary of the range of brainwaves (arranged in order of decreasing frequency), which can be measured in a living human brain with the technology described above. These are normally labelled with letters of the Greek alphabet, and here these have been transliterated into English for convenience. These brainwave ranges are to be correlated with experiences reported in “meditative” and “trance” states of consciousness, either in a waking or in a sleeping subject. We start with Lambda waves, with a frequency of about 200 Hz. At these frequencies we are said to attain “Self awareness, higher levels of insight and information. Tibetan monks that walk barely clothed for days through the snow have exhibited high levels of these. They are difficult to measure and little is known about them. They are carried on the very slow moving Epsilon waves (< 0.5 Hz)” [59]. In “non-sleep” states hyper-Gamma waves (100 Hz and above) can be characterized as generating states that are “Hyper-aware. Extreme concentration. Above 100 Hz, higher-level awareness of unity; higher mental activity, including perception and consciousness. Cortex synchronize themselves together in a more holographic manner during extraordinary states of consciousness associated with ‘Shamanic’ and ‘Mystical’ experience” [62]. We next meet Gamma waves which are present in trance states, and encompass frequencies from 38 – 90 Hz. These are “Important in harmonizing and unifying thoughts processed in different parts of the brain. Combine different perceptions. Suppressed totally by anaesthetic. Found in all parts of the brain.” They are crucial for “Self awareness and insight” [59]. At the lower end of Gamma waves 40 Hz is “The core frequency. Important in cognition, especially coordinating simultaneous processing in all parts of the brain. Deficiencies exhibit learning difficulties. Produced during hypnotic states” [59]. We next observe the Gamma – Theta transition. We can understand this by trying to answer the question “Has your perception of time ever slowed down during an emergency? Have you ever had minutes or hours worth of experiences in a moment? That’s your mind cycling between the theta and gamma brainwaves. The theta-gamma state is most conducive to instant healings” [63]. We will return to this question of brainwave-induced healing later. Next down the ladder of frequencies come Beta waves ranging in frequency from 14 Hz – 30 Hz and representing a normal, waking state, where one is “Wide awake, alert, focused, analyses and assimilates new information rapidly, complex mental processing, peak physical and mental performance, cannot be sustained indefinitely otherwise exhaustion, anxiety, and tension result” [59]. In this range of brainwaves we show “High levels of concentration and focus” [62] characterized by “Externally-directed linear thinking and mental activity” [62]. They are “Generally associated with left-brain thinking activity – conscious mind” [58]. We find that “Beta waves are characteristics of a strongly engaged mind. A person in active conversation would be in beta. A teacher, or an engineer would all be in beta when they are engaged in their work” [57]. This range can be further partitioned into midrange-Beta waves from 15 Hz – 18 Hz measured in “Neurofeedback training that produced alert behaviour, useful in depression cases” [59]; and low-Beta waves from 12 Hz – 15 Hz which are “Also known as Sensory Motor Rhythm (SMR) – [evidenced by] vigilance, reduced mobility, shallow breathing, less blinking, fixed attention

and eye focus, enhancing through neurofeedback reduces epileptic symptoms and has a calming effect (ADHD sufferers)” [59]. These actually have the lowest amplitude of Beta, Alpha, Theta, Delta waves [57]. Next we observe the Beta – Alpha transition at about 12 Hz. Alpha waves at frequencies from 8 Hz – 13 Hz characterise the trance state and REM sleep. Alpha waves have larger amplitude than Beta waves [57]. In general, Alpha state is “Hyper-efficient in processing single tasks as it can focus on the details as well as the overall task at the same time” [59]; in trance this equates to “Inner mental pondering. Typical meditative state” [62] – and in sleep, to “Internally-directed non-linear mental activity” [62]. Alpha state can be represented as “Relaxed, Daydreaming. Generally associated with right-brain thinking activity – subconscious mind – a key state for ‘relaxation’” [58]. In Alpha state individuals show “Mental coordination and resourcefulness, relaxation, alert but not mentally processing anything, inward focus, calmness, at ease, deep breathing and closed eyes can amplify alpha production, peak around 10 Hz” [59]. We make a link here with the meditation practices described above in observing that “A person who takes time out to reflect or meditate is usually in an alpha state. A person who takes a break from a conference and walks in the garden is often in an alpha state ... [It has been] Suggested that it is a light state of hypnosis” [57]. In terms of hypnotherapy we can conjure up a useful metaphor here since “The alpha brainwave forms a bridge between the conscious (beta) and unconscious (theta) mind. It is associated with creativity and rapid learning. For this reason, energy healing techniques, such as Reiki, use this frequency. And guided meditations bring participants into alpha to promote relaxation and healing. The alpha state is especially effective for relieving pain. Those who don't function well at this frequency find it difficult to remember details of even powerful dreams, guided visualizations, and meditations. In short, that bridge between conscious and unconscious mind is weak” [63]. Next comes the Alpha – Theta transition measured at 7.48 Hz which is the “Primary ionospheric resonance (Schumann) frequency. Stimulates retrieval of memories from the subconscious” [59]. We are now in the Theta wave state ranging in frequency from 4 Hz – 7.5 Hz. In its trance manifestation we find Theta state engenders “Original, creative inspiration, problem solving and visualization. Out-of-body or astral meditative forms; great spiritual insights associated with visions and sounds. Classic ‘Shamanic Journeying’” [62] – and in sleep mode we have “Dreaming sleep, emotional elements and experience. We now recognize REM as the dreaming sleep state, somewhere in deep alpha to light theta” [62]. Theta waves are higher in amplitude than Alpha waves [57]. In Theta state we are “Deeply Relaxed, Dreaming. Generally associated with right-brain thinking activity – deeper subconscious to superconscious. Access to insights, bursts of creative ideas – a key state for ‘reality creation’ through vivid imagery” [58] – this is very useful for “Memory access, learning, deep meditation, sensations, emotions, the threshold of the subconscious, dreaming” [59]. It is useful to characterize Theta state by the fact that “A person who has taken time off from a task and begins to daydream is often in a theta brainwave state. A person who is driving on a highway, and discovers that they can't recall the last five miles, is often in a theta state – induced by the monotonous process of freeway

driving. Individuals who do a lot of driving, jogging, commuting often get ideas during those periods when they are in theta. This can also occur while you are in the shower or brushing your hair. It is a state where tasks become so automatic that you can mentally disengage from them. During this awakening cycle it is possible for individuals to stay in the theta state for an extended period of say, five to 15 minutes – which would allow them to have a free flow of ideas about yesterday's events or to contemplate the activities of the forthcoming day. A person in a hypnotherapy session experiences a theta state of relaxation and allowing the mind to disengage from tasks, just following the voice of the therapist inducing positive suggestions. This time can be an extremely productive and can be a period of very meaningful and creative mental activity. The ideation that can take place during the theta state is often free flow and occurs without censorship or guilt. It is typically a very positive mental state" [57]. Indeed in terms of therapy "This is the state of medium state of hypnosis" [57]. Further subdivisions of Theta state are possible and frontal-midline-Theta from 6.2 Hz – 6.7 Hz is important in "Cognitive activity, maths problems, sustained attention, extrovert personality, low anxiety" [59]. At lower frequencies around 4.5 Hz Theta we find that "Shamanic trances, Tibetan mantras, Buddhist chants all use this frequency to access altered states" [59], and slightly lower still at about 4 Hz Theta we have "Object naming" [59]. In terms of hypnotherapeutic healing it is conjectured that "Through the theta brainwave we gain access to our unconscious mind, namely, our deepest beliefs, traumas, and childhood learning. Even if long-forgotten, they influence our decisions daily. ThetaHealing aids us in discovering the fears and beliefs that drive us and in changing them into life-affirming ways of being. Theta is also the state of deep spiritual connection. Have you ever experienced the sublime? For instance, have you stood on a mountain top, feeling at one with your surroundings, and absolutely known that you are connected to everyone and every thing – past, present, and future? Known that God, the Creative Life Force, is? That's the kind of knowing the theta brainwave engenders" [63]. The Theta – Delta transition occurs at about 3.5 Hz, allowing "Long term memory access" [59]. The Delta state ranges in frequency from 0.5 Hz – 3 Hz. In its trance manifestation we have "Deep physical relaxation. Meditative states associated with being in the 'void' or 'white-light.' Deep-level Yogic adepts can slow respiration and heartbeat to virtually undetectable" and "This is the very deep level of trance, of hypnosis" [57] – whilst as a sleep state Delta is the "Deepest and most physically restorative sleep" [62], being "Dreamless. Generally associated with no thinking – unconscious / superconscious. Access to non-physical states of existence – a key state for healing, 'regeneration' and 'rejuvenation'" [58]. Both of these manifestations are characterized by " ... human growth hormone release, low blood pressure, low respiration, low body temperature. No muscle movement – Reticular Activating System (RAS) shuts this down" [59]. Delta is state of greatest amplitude [57]. The Epsilon trance state occurs for frequencies below 0.5 Hz and is characterized by "Extraordinary states of consciousness. Very high states of meditation, ecstatic states of consciousness, high-level inspiration, spiritual insight and out-of-body experiences" [62]. This is "The state Yogis go into when they achieve 'suspended

animation' where no heart beat, respiration or pulse are noticable" [59]. If we survey across the various brainwaves we find that in general, "Lower brainwaves (Delta, Theta, and low Alpha) may cause stupor and sleepiness. They tend to release serotonin while higher frequencies (Beta and Gamma) release more dopamine. Beta frequencies organize thoughts, helping you to remember things and concentrate. Withdrawal from Alpha Waves makes you remember childhood memories. Alpha waves relax the body and help blood flow to extremities" [61].

Now let us turn to the field of "hypnosis" – a word which is a relatively modern coinage. An up-to-date, but "unauthenticated" and "popular" commentary reads as follows: "Hypnosis is portrayed as a procedure which introduces a subject into a mental state where they can be made to recollect knowledge not consciously accessible, accept instructions and commands, or be given instructions ('post-hypnotic suggestion') that can be triggered when the subject has left the hypnotized state ... The states invoked by clinical practitioners of these methods are very similar, implying that they are, in fact, describing the same phenomenon. The methods employed and the underlying methodologies have still not converged to the point where there is consensus on a single definition of hypnosis. Hypnosis is commonly viewed as a natural, altered state of consciousness, where the conscious (analytical) mind is bypassed, and the subconscious (creative) mind is accessed. This allows the client to use the power of visualization and suggestion, given by oneself or another, to change and improve behavior patterns. Hypnosis, in itself, is just a state of mental and physical relaxation, along with a more focused sense of concentration. Hypnosis is not sleep (as is often popularly assumed), and most people find that they are more aware of smells, sounds, and feelings than usual. This concentrated awareness is what allows the hypnotherapist to plant positive suggestions and images in the mind of the client to bring about lasting changes ... This school of thought holds that hypnosis as a state is very similar to other states of extreme concentration, where a person becomes oblivious to his or her surroundings while lost in thought. He or she quotes, as an example the experience, when driving, of suddenly finding oneself much further down the road without any memory of driving the intervening distance, or when a person is watching television and focuses so intently on the program that he or she ceases to be aware of the sides of the screen. The act of hypnotizing, is, in effect, the act of manually inducing a similar state" [64]. So in short, the answer to the question "what is hypnosis? – is that " Simply stated, it is a bypass of your *critical factor* that allows access to the subconscious. A hypnotherapist, the TV, a trauma, a shock, extreme relaxation, and even sheer repetition and boredom can bypass the critical factor" [62]. This relies on the supposition that we possess a mental "critical factor" which is " ... a small, but very powerful part of you. Think of it as the gatekeeper. Because the subconscious believes anything that falls in there is true (yes, *anything*) we have a gatekeeper that protects our subconscious from accepting things that might hurt it or that might be against its moral or ethical code. It's a filter, but it doesn't start forming until you're about 5-years old and it isn't completely formed until you're about 10 or

12. Once the critical factor is bypassed, you've entered a hypnotic trance state" [62]. The importance of this is that "During the trance state, the two halves of the brain are linked; therefore, more information flows between them. Nerve cells that control habits lose some of their electrical charge allowing you to become more receptive to change. Imagery and positive suggestion assist in forming new connections giving you the desired results of the changed habit" [62]. In terms of hypnotherapy there has been a change in our understanding of the nature of trance since "For a long while it was thought that alpha wave patterns were characteristic of hypnotic states. It is now understood that it is theta and to some extent delta waves and 40 Hz gamma waves that are predominant. Other wave patterns occur, even active beta waves, but these are due to the content of the suggestions and the images created by them" [59]. Now following on from this, we note that the sequence of brain states attained as a subject is hypnotized may be described thus – "As you relax and then close your eyes there is a brief build up of alpha waves – As the induction ... develops there is an increase in theta and to a lesser extent delta activity and the alpha activity drops away – This continues until the end of the hypnotic deepening – During the therapeutic suggestions the brain wave activity can vary depending upon the nature of these suggestions and the effect they are having. Generally during this period the delta and theta wave activity begins to slowly subside – Through the whole hypnotic process there is a gradual increase in 40 Hz gamma wave activity – During termination the alpha activity and finally the normal beta activity returns" [59]. In terms of the sequence of states described above we find that "Some research has been done associated with the activities and benefits of other brainwave frequencies, such as Super Beta, Gamma, etc. The lower your brainwave cps [frequency, cycles per second], the more is your awareness turned toward your subjective experience, toward your inner world and the more effectively are you able to use the power of your mind to create changes in your body. With each lower state you become more fully aligned with the source of power within you, with your unconscious, or if you prefer, with that part of you that is greater than you (your body)" [58]. So, "Generally in Beta state, your attention is focused outward. In alpha it begins to turn inward, and in theta and delta it goes further and further inward. The deeper you go, the more effectively are you able to enter your subconscious. You can imagine that at the borderline between Beta and Alpha States is a doorway to your subconscious mind, and the doorway consists of what is hypnosis referred to as your 'critical faculty'" [58].

Let us now move from mystical meditation through hypnotherapeutic trance, to pure technology, whereby "Brainwave synchronization ... provides a shortcut to experiencing deeper states of mind giving you an opportunity to access higher states of consciousness and extraordinary abilities in very short time through brainwave entrainment. This way you can experience almost immediately the effects that took someone years of meditation to achieve ... Entrainment is the process of synchronization, where vibrations of one object will cause the vibrations of another object to oscillate at the same rate. External rhythms have a direct

effect on the psychology and physiology of the individual” [65]. The mechanism by which this is perceived to work is that “If slightly different audible tones are played to each ear through stereo headphones then as the brain puts these two sounds together it creates brain waves of a frequency equal to the difference of the two tones. For example, if the left ear was played a 200 Hz tone and the right ear a 210 Hz tone the brain will respond with a 10 Hz brain wave (termed a frequency following response)” [59]. This frequency-following response is a general physical phenomenon: the technological breakthrough is that now “ ... this process has gone digital through the use of binaural beats. This is accomplished by sending two different sounds (tones) to each ear through stereo headphones. The two hemispheres of the brain then work in unison to ‘hear’ the third signal, which is not played, but rather produced as a result of difference in frequency between two beats that are heard. Sending specific frequencies to each ear entrains the brain to enter effortlessly a specific state of mind. If the left ear is presented with a steady tone of 400 Hz and the right ear a steady tone of 407 Hz, these two tones combine in the brain. The difference, 7 Hz, is perceived by the brain and is a very effective stimulus for brainwave entrainment. This 7 Hz is formed entirely by the brain. When using stereo headphones, the left and right sounds do not mix together until in your brain. The frequency difference, when perceived by brain this way, is called a binaural beat” [65]. So, this is the scientific basis of the entrainment process – but what does it actually *do*? Well, “The significance of this is that with a careful choice of frequencies, you can rapidly alter your state. For example, you can reproduce the patterns of brainwaves associated to falling asleep as the activity descends rapidly through alpha into theta and delta waves. Many other states have been induced by the method such as learning, meditation and creativity. You can stack and overlap different binaural tones to produce quite complex states. Where somebody shows abnormal brainwave patterns, such as ADHD (Attention Deficit) or psychotic episodes, it is possible to train the brain back into a more normal pattern. The possibilities are enormous, and though research is still in its infancy, you can see how useful this could be both therapeutically and for self improvement” [59]. We now see that it is possible to integrate the ideas of brainwave entrainment with “traditional” hypnotherapy and meditation by using a sequence of frequencies – “A period of alpha waves at the start behind the pre talk, at say 10 Hz, a frequency known to stimulate serotonin and produce relaxation – A gradual build up of theta which will remain the dominant wave pattern, at perhaps a frequency of 4.5 Hz. This is the frequency used by Shamanic drummers to induce trance states – A gradual build up of delta waves – Towards and during the reinforcement phase and termination introduce a ‘learning’ theta frequency at around 4 Hz – You can try a short period of alpha during termination – If the final aim is to feel refreshed and revitalised then end with a beta wave wide awake frequency depending upon the nature of the therapy, for example around 13.8 Hz (calming for ADHD) or 17 Hz (alert for depression)” [59]. In terms of the usefulness and efficacy of such entrainment protocols we find that “These are quite powerful products and have the ability to cause quite significant changes in personality and behavior, over time. Please follow the instructions provided. I have noticed a worrying trend on a number of

brainwave entrainment message boards where individuals have been experimenting randomly, for example, by hooking themselves up to ... [an entrainment computer programme] all night at some inappropriate frequencies. This neurologically on par with shooting up heroin ... It seems that due to the complex nature of wave interaction in the brain, simple frequency overlaying is a pretty random exercise. Best to emulate an already existing pattern rather than go wild with the impressionists brush" [59]. One commentator notes that in fact "I am also coming to the conclusion that it is not only the actual frequencies that are important but the sequence and timing that is most significant. Very little is known about this ..." [59].

And despite very little being known about the exact nature of brainwave entrainment processes they are still employed frequently today, without supervision and foresight, and it has been reported that this can lead to side-effects such as dilated pupils and vivid dreams; as well as eye pains and seeing (purple) spots from a few days to weeks after using entrainment [61]. Potentially more serious effects reported are "eye explosions" (sudden pains in the eye), which may be due to aneurism and seeing "swirls of colours" or "psychedelic colours" [61]; sudden explosive head pains, headaches, migraines; "cloudy mind," confusion, disorientation, emotional instability, irritability, lowered inhibition, manic depression, paranoia, disturbed sleep, nightmares, night terrors; convulsions; and addiction to entrainment [61]. Furthermore, with entrainment processes it is possible to "overload" the brain with waves of a particular frequency and there is some indication of the problems which can occur with overload of each type of brain state. Delta overload is characterized as bringing about a soporific state from which it is very difficult to awaken, and in which it is hard to concentrate. However it is reported that exposure to a few minutes of Alpha waves (12 Hz) can help to come up out of this overload state [61]. Theta overload is described as a "dreamlike state," in which one has difficulty concentrating and shortened attention span, and where people often see "swirls" of colour. Generally Theta-overloaded individuals return to normal spontaneously after a few hours; once again a few minutes' Alpha-wave therapy can help [61]. Alpha overload has the widest complex of symptoms, many occurring one to two weeks after beginning entrainment. Some people report disturbed vision, with 30 – 45 minute periods where they experience seeing psychedelic colours. In this eventuality the individual is advised not to worry, but to stop using entrainment for a while, and that their vision should return to normal. Other people report disturbed sleeping patterns and feelings of exhaustion, but once again the circadian rhythm should return to normal if brainwave entrainment is stopped for two weeks. Paranoia, sudden stabbing pains in the back of the head, and sensitivity to light and sound are also common [61]. One commentator reports that on Alpha overload he recalled childhood memories and began to notice "similarities in people's faces with people that I know or used to know" [61], and states that this is very common, but suggests that one should stop using entrainment if any of these side-effects occur. Very rarely, people are said to develop a "photographic memory" from about a few days to a week after Alpha overload

[61]. With Beta overload one can experience focused attention, agitation, mania, vivid dreams, rapid, pounding heartbeat, moodswings, paranoia, insomnia and obsessive-compulsive behaviour [61]. In this case a few minutes' 8 – 10 Hz Alpha-entrainment is recommended to "help you calm down" [61].

And so the fusion of these ideas from mystical mantra meditation and subtle scientific study lead us naturally to a discussion of "alternative" therapies and remedies which are becoming popular once again – since, as Stevens comments, "Many of today's complementary or alternative systems of healing involve magical beliefs, manifesting ways of thinking based in principles of cosmology and causality that are timeless and absolutely universal. So similar are some of these principles among all human populations that some cognitive scientists have suggested that they are innate to the human species, and this suggestion is being strengthened by current scientific research ... " [8]. We can exemplify this in terms of modern complementary medicine if we realize that "Some of the principles of magical beliefs described above are evident in currently popular belief systems. A clear example is homeopathy. The fundamental principle of its founder, Samuel Hahnemann (1755 – 1843), *similia similibus curentur* ('let likes cure likes'), is an explicit expression of a magical principle" [8], [67]. Moreover, "According to a recent religious survey, 25 percent of all Americans believe in 'nonpersonal ... life energy but not in a personal God' [68]. New Age practitioners commonly call such power 'universal life energy' ... universal energy is equated with God by New Age practitioners. This is the fundamental undergirding of New Age thinking. One New Age adherent, Rosalyn Bruyere, has said, 'For me, the terms God and energy are interchangeable. God is all there is, and energy is all there is, and I can't separate the two' [69]" [14]. However there is a certain denial of "hard physical reality" in these beliefs since "Universal life energy is considered an 'invisible, unmeasured, yet infinite energy which is the basis of all existence' [69] ... It is unlike physical energy, whose power is derived from material sources like the sun, crude oil, or atoms" [14]. Further, "It is not merely a *form* of energy; it is *the* energy which flows from the universe into living creatures and circulates within them in an orderly manner ... Belief in universal life energy pervades New Age medicine ... universal energy is the basis of all life ... New Age therapists assert that disease occurs when there is an imbalance or blockage in the flow of universal energy through the body" [14]. This mystical-scientific fusion gives rise to the proposal of a "natural principle" that "... ultimately everything is made out of energy that resonates at a specific frequency. If you put several pendulum clocks on the wall and set them to swing at different rates, in time they will get synchronized, all of them swinging in unison. It has been noted that women sleeping in the same dormitory whose periods would occur at different times of the month, would in time tend to synchronize their periods. People who live together for many years, may even tend to look alike, as their energies are becoming synchronized. Another side effect would be increased telepathic ability between them – they'd just find that they would think the same thought at the same time, and perhaps surprise themselves by saying out loud the same word

at the same time. In NLP, the entrainment with another person is often intentionally done through matching a breathing pattern” [65]. Of course this is strongly reminiscent of the postulated vibration of the seed mantras described above. In terms of these vibrations, “Bioenergetic Therapy is energy therapy that helps your own body’s energy unknot and heal itself. Our bodies are basically biochemical batteries. We eat food that our bodies convert to energy, which is used for numerous biochemical reactions, including regulating hormones, heart rate, breathing, nervous function, and so on. Remember from your high school chemistry and physics that batteries generate a current and that, that current creates an electromagnetic field. So do our bodies, however small or great that electromagnetic field might be and however sensitive, or insensitive, we are to it” [62]. In fact we have already alluded to the ancient lineage of trance, and this shows that “The application of the principle of brainwave entrainment to alter states of mind is not new. Drumming and chanting have been used in different cultures to create rhythmic patterns which would stimulate altered states of consciousness” [65]. In modern “alternative“ medical approaches we find that we can thus “Conceive of the healer as an individual whose health gives him access to an overabundance of prana and whose strong sense of commitment and intention to help ill people gives him or her a certain control over the projection of this vital energy. The act of healing, then, would entail the channeling of this energy flow by the healer for the well-being of the sick individual ... The healer accomplishes these changes by creating the desired feeling (cool in place of warm) in his mind and directing this image to the patient through his hands” [14]. And “Examples of bioenergetic therapy include Qi Gong therapy from traditional Chinese medicine, Reiki from the Japanese, Therapeutic Touch, and most other forms of therapy that involve a laying-on-of-hands of some type. The technique of laying-on-of-hands dates back to biblical times, and probably before. Several studies have now been done that give us a better understanding of how these bioenergetic therapies work: The electromagnetic field around the practitioner’s hands increases providing a denser magnetic field ... The bioenergy therapies decrease the required healing times and help reduce stress and anxiety. They help you find your ‘happy’ [place] and release trapped energy. They’ve been shown to help with pre- and post-operative patients” [62]. Even in terms of conventional medical practice we find that “Many medical practitioners are familiar with Reiki now and use it to help their patients heal faster. This therapist practices several types of bioenergetic therapies, including Reiki, Karuna Healing, Reconnective Healing, and Integrated Energy Therapy, a form of cellular release therapy ... Tai Chi is a form of exercise that incorporates working with your own body’s Qi, or life force energy” [62]. Now, given the wide range of potential side-effects of entrainment described above, as well as the pseudo-drug brainwave effects listed in Table 1, one can certainly imagine that combining several, or many, of these, brainwave states, and allowing interactions between them which vary with time, can produce “almost magical” effects and affects in an individual. And if we go further along the “New Age” path, we “ ... can imagine that at the borderline between Alpha and Theta states is a doorway to your superconscious mind, where you begin to gain access to your ‘supernatural abilities’,

which for most people manifest as bursts of insight. The more time you spend in this state, even if you're not intentionally attempting to create a change, the more of these 'abilities' begin to become part of you – you may simply notice that the time-lag between what you think and its manifestation in your outer world becomes shorter and shorter" [58]. Following this line of thought to its mystical conclusion then " ... you can imagine that at the borderline between Theta and Delta, you're beginning to say 'good-bye' to your physical experience of the world, as you're getting altogether into experiencing yourself as non-physical being. Here your body is only a thought in your mind. If you are able to maintain your consciousness at this level, you can effect instant changes in the outer world. In this state, you can transcend the 'laws of the physical world' because you're not bound by them any more. Whenever you think, you expand energy. In deep, dreamless Delta state, where your mind is fully resting, your body has the best opportunity to regenerate" [58]. One final application of brainwave technology is demonstrated in its coupling with artistic expression in the form of "Bio-music" [70]. Here, the practitioner is advocated to use a "bio-signal pre-amplifier" to "listen to and learn the rhythms of your system" [70] – Alpha waves are recommended since they engender a "contemplative state" where the "body system is quiescent" [70]. A keyboard system can be coupled with, and used to manipulate, the basic brainwave pattern, and used in improvisation according to recursive rules such as "1. play only while in alpha; as you drift out of alpha devote yourself to regaining that state. 2. relate the rhythms of your playing to the rhythm of the bio-signal being used. 3. generate your own rules" [70]. It is suggested that the bio-musician be constantly aware of images and events, especially those "thrown almost randomly together" [70] and select "patterns in the relationships of images via form, content, semantic juxtaposition, etc" [70]. This will lead the practitioner to "Develop ... integrating systems of thought and action processes and their dynamic interrelationship" as appropriate [70]. The motivation and rationale for this approach is that "In a sense the task is to explicate these interior processes and to demonstrate inner/outer correspondence leading to an understanding of the identity of nature – of the nature of identity ... " [70] – in itself a form of magical action, as elucidated below.

We conclude now by establishing the link between hypnotic trance, mantra meditation, and religious ritual, by means of which "your body becomes only a thought in your mind" – "you can effect instant changes in your perceived outer world" – "manifest bursts of insight" – and uncover "inner/outer correspondence leading to an understanding of the identity of nature – of the nature of identity." The work previously cited [1] concludes that: "The purpose of all rituals in ceremonial magic is to unite the microcosm with the macrocosm to join God, or gods when invoked, with the human consciousness. When such a supreme union is achieved the subject and object becomes one. This is because the magician feels that he is consciously in touch with all elements of the universe, therefore, he can control them. It may be said, the magician feels connected with the universe. This feeling intensifies the more the magician successfully practices his skills. Whenever he experiences a failure he knows that the ritual was not

performed correctly” [71]. We can thus conjecture that at the heart of these “ceremonies” and “rituals” lie implicit mechanisms for entrainment, which lead to affects perceived as the conjunction of “microcosm with macrocosm.” We can make the link here between therapy and magic in that the ultimate goal of hypnotherapy is to use specialized therapeutic tools to reveal the hidden contents of the primal, emotive, unconscious, and allow a reunification of these with the mechanisms of the logical, evaluative, conscious. In this sense the client in therapy seeks to become “consciously in touch ... connected with the universe,” and indeed it is usually observed that this “working out” is psychically costly and that the “this feeling intensifies the more the client practises his skills.” This work on magical ritual alluded to above has shown that the basic execution (or “meaningful solicitation”) of “... action-based ritual agency lies in the extensive use of spells and formulas in magical rituals” [72], demanding highly specific spoken or written language patterns, times, places, rituals and ingredients, to be effective. We should recognize along with Sørensen that “Spells are ... a special type of speech-act almost devoid of ordinary communicative function and symbolic content ... believed to establish or create a desired state of affairs by their performative power alone or by coercing supernatural powers to produce it” [72]. We can once again make a link here with modern Ericksonian hypnotherapy with its “artful vagueness” and “sleight of mouth” patterns [73] – [78], by realizing that, in a more general sense, “Linguistic anomalies have always been described as one of the distinctive marks of magical rituals. Think of *abracadabra* and *simsalabim* of the variety magician. These linguistic deformations are spread all over the linguistic register and have a very distinct effect used to mark off the ritual space from everyday communicative interaction ... language in magical rituals can profitably be understood as a blend between natural, everyday, profane language ... and idealised sacred or magical language(s) ... Cultures and even individual rituals within a culture can use different linguistic parameters in the construction of a ritual space, so, like the genetic blend, the linguistic blend should be understood as an abstract model depicting the relationship between natural and sacred language found in magical rituals” [72]. And the specificity and peculiarity of hypnotherapeutic language patterns certainly do fit into this definition – the importance being the blending between “natural” day-to-day language and the “magical” patterns utilized in the therapeutic domain, which act to open the communicative barriers between the conscious and unconscious realms. And as we have seen, if the hypnotic language patterns can be used to engender brainwave entrainment, then the effects can appear as “magical.” Moreover, performing the “spell” requires great concentration to exercise one’s “Will” over the “supernatural” (unconscious) forces – for example, Pederson says: “If the soul is strong then it must leave its impress on all his undertakings ... The soul is a whole saturated by power” [79]. LaVey goes on to comment on this critical feature of magical ritual, stating that “One of the most overlooked ingredients in the working of magic is the accumulation and subsequent direction of force toward an effective end” [80]. Bely expands on this and makes the link between magic and meditation, stating that “Concentration is – a pathway to meditation; meditation is not wandering of thought, but the recognition of thought

as alive ..." [16], and for the magical practitioner to exercise her Will, "... understanding is not enough: we must comprehend [the spell], take it into ourselves" [81]. Once again there is a strong link between magical hypnotic language, concentration and entrainment, and we note here that, "Despite all non-verbalists' protests to the contrary, soaring heights of emotional ecstasy or raging pangs of anguish can be attained through verbal communication. If the magical ceremony is to employ all sensory awareness, then the proper sounds must be invoked. It is certainly true that 'actions speak louder than words,' but words become as monuments to thoughts" [80]. In terms of "magic," a successful "working" results in the projection of subconscious symbols onto these forces in order to impress them to change, through the utilization of appropriate language. These latter comments, I think, correspond well with the observation that hypnotherapeutic "magic" works by "distracting" the logical, rational, conscious mind – and that by tying it up in self-replicating, self-referential processing knots, the therapeutic "wizard" can send it bouncing round infinitely-nested recursive loops, entrained to appropriate states, whilst leaving the creative, metaphorical subconscious processing faculties to soar free and create "magical" change and growth. Previous work has discussed in detail how one can utilize the generic philosophies of NLP, embodied in its "Mantras," to bring about appropriate and lasting change, growth and life-enrichment. Bearing in mind that NLP is rooted in the work of Bandler, Chomsky, Freud, Grinder and Jung, amongst others, a "NLP Mantra meta-strategy" for generating new strategies was proposed, whereby "First, we identify a past or present situation where we desire to change our behaviours, performances, or outcomes. We then go on to review the situation using each Mantra in turn, embracing all the conscious and unconscious learnings about ourselves, others, the situation, and also about alternative choices, actions, strategies and Mantras ... In this context it is important to check for ecology and congruence, before future-pacing the outcomes, and going on to install the new behaviours" [7]. Furthermore we gain an understanding that, through such therapeutic "languageing," we can learn to "re-mythologize ourselves" by going through a struggle with "... language on the boundaries, language about language, about 'access to the power to signify' [82]" [10], and that in this way we can each become a "Lingwiz'd of Is" – "... a writer and a rewriter, a reshaper, an appropriator, a refigurer ... [using] language 'self-consciously spliced' ... [eschewing] 'an original language before violation'" [10], to create an unfolding, enfolding logo-myth "in which everything is always that which it is only because it becomes that which it is not" [83]. We have previously elaborated the mechanism of hypnotic change in the context of "Psycho-chaotic Semiotics" and shown how the language used could be thought of metaphorically as exercising "magical" effects due to the intertwined nature of the mind's neural nets, and our linguistic meaning-making processes [84]. The exact mode of operation of this mechanism is the Neuro-linguistic-hypnotic phenomenon of "Trans-derivational Search" and having made these first links between mantra and trance, further work is in progress to elaborate in detail the nature of the relationships in terms of language and brain function. We will thus be able to use our hypnotic Psycho-chaotic, and Neuro-linguistic, tools, to change core beliefs and values from

those indoctrinated by the prevailing religious or scientific ideologies of our society, and fill the resulting “vacuum of choice” with empowering personal logo-myths which lead to true psychic freedom and power [85]. We are then well on our way to building a “mascirelgic” [1] framework for the reunification of scientific therapy, magic and religious practice.

Thus we have completed our trance-journey from religion and mystical mantra mediation, through magical and therapeutic intervention, to pure technological utilization. We have seen how each of these in its own context uses the inherent power of sound and language to create and manipulate psychic experiences ranging from nightmarish visions, to religious ecstasy, to incredible self-awareness, to deeply peaceful healing coma. We have also seen that whereas the ages-old practices, rooted in mysticism and steeped in tradition, seem to engender “blissful” mental and healthful, healing physical states, caution should be exercised in technologically and unnaturally “forcing” the trance-states, if physical and psychic well-being are to be preserved. Modern hypnotherapy seeks to steer a course between the mystical and the scientific realm, by acknowledging its roots in the former, and properly understanding and utilizing tools from the latter, to best provide a new route for “magical” creativity, healing, growth and change, as anthematized thus [70] –

This is an activity of mental eco-logic.
It is the logic of the stone in the circle
the logic of the Tao
the logic of ecology and of the mind.
Dreams are plays upon, playing with
the logic and the form and the content
for logic and form and content are inseparable, identical
each is a way of perceiving
a part of perception
and the ability to perceive.

Myth, Dream and Reality

Myth the structure

Dream the growth

Reality the manifestation through language and consensual validation.

Through the structure grows the dream into reality and reality into dream.

Our perception is the medium through which we realize these processes and bring
them into meaning.

Logos, the breath of life
enters the fire of knowledge
into the wellsprings of consciousness
Fire and Water are the dynamic opposites
in whose conjunction the breath, Air, manifests its own conjoined opposite,
Earth, manifest reality.

This mythic primordial dynamic
contains the seed of a concept of process,
dynamic through the multitudinal diversity of manifestation of relation and
interrelation.

Relationships between things in deep and intricate structure.

Image, language and the world.

References

- [1] Jemmer, P W (2007) 'Mascirelgic' – A Logomyth for a New Millennium. *Bifrons Creativity* Number 2 October 2007 pp. 1 – 62. URL: http://www.bifrons.org.uk/number_2.pdf [Accessed 6 October 2007].
- [2] Jemmer, P (2007) 'Nomen Omen:' Language and the Nature of Names. *The Hypnotherapy Journal*. Winter 2007, Issue 4, Volume 7, pp 24 – 30.
- [3] Jemmer, P (2007) 'Sila Slova' – The Power of the Word. To be published in *Fidelity: The Journal for the NCP*. Autumn 2007.
- [4] Jemmer, P (2007) 'Lingua Creationis' and The Creative Nature of Language. *The Hypnotherapy Journal*. Autumn 2007, Issue 3, Volume 7, pp 25 – 31.
- [5] Jemmer, P (2007) 'Esh Emet' – Language: Fire of Truth? *Fidelity: The Journal for the NCP*. Summer 2007, Edition 287, pp 20 - 23.
- [6] Jemmer, P (2007) 'Hlör u fang axaxaxas mlö' – A Strange Journey in a Strange (Martian) Languagescape. *The Hypnotherapy Journal*. Spring 2007, Issue 1, Volume 7, pp 16 – 22.
- [7] Jemmer, P (2007) Glossolalia and Neuro-linguistic Programming as the 'Other Tongue'. *European Journal of Clinical Hypnosis. The Journal of the British Association of Medical Hypnosis*. Issue 3, Volume 7, pp 22 – 33.
- [8] Stevens, P (2005) *Magical Thinking in Complementary and Alternative Medicine*. URL: <http://www.csicop.org/si/2001-11/alternative.html> [Accessed 20 November 2007].
- [9] Hofstadter, D R (1999) *Gödel, Escher, Bach: An Eternal Golden Braid*. New York NY: Basic Books.
- [10] Ake, S E (2007) *Metanexus Institute: The Global Spiral: Abigail S Kluchin: The Cyborg and the Golem: Part 1 of 2*. URL: <http://www.metanexus.net/Magazine/tabid/68/id/8123/Default.aspx> [Accessed 30 September 2007].
- [11] *The Definitive Guide to Dhaman Sanskrit Mantra*. URL: <http://www.users.totalise.co.uk/~anu/sanskrit.html> [Accessed April 2005].

- [12] Ashley-Farrand, T (2004) What Is a Mantra and How Does It Work: A Selection from Healing Mantra. URL: <http://www.sanskritmantra.com/what.htm> [Accessed 19 May 2005].
- [13] Mantras and Prayers. Dal Sabzi for the Aatman (TM) is the sole property of Shakun Narain. URL: http://www.dalsabzi.com/Mantras/mantras_intro.htm [Accessed 25 May 2005].
- [14] Van Rheenen, G (2003) Communicating Christ amongst Folk Religionists: Kingdom Missionary in Satan's Nest. Chapter 9 Impersonal Spiritual Forces. URL: <http://www.missiology.org/folkreligion/chapter9.htm> [Accessed 13 May 2005].
- [15] Hiebert, P G (1983) Classroom Notes from M620: Phenomenology and Institutions of Animism. Pasadena CA: Fuller Theological Seminary.
- [16] Bely, A (1922) Glossalolija: Poema o Zvuke. Berlin, GER: Hermann and Company (Typographie: Epoque); Beyer Jr, T R (translator) (2001) Glossolalia: A Poem about Sound. URL: <http://community.middlebury.edu/~beyer/gl/glossenglish/glosseng.html> [Accessed 5 February 2005].
- [17] Easwaran, E (2003) God Makes the Rivers to Flow. Petaluma CA: Nilgiri Press Books.
- [18] Carroll, R T (2002) The Skeptic's Dictionary: Transcendental Meditation (TM). URL <http://skepdic.com/tm.html> [Accessed 11 February 2005].
- [19] Yoga Paths: Mantras. URL: <http://www.inthelight.co.nz/spirit/mantras/mantras.htm> [Accessed 06 June 2005].
- [20] Meditation Is Easy. URL: <http://www.meditationiseasy.com/> [Accessed 9 October 2007].
- [21] Swedenborg, E (1962) The Spiritual Diary: Volume 1: London UK: Swedenborg Society; Volumes 2 – 5: Bryn Athyn PA: Academy Book Room.
- [22] Bandler, R and Grinder, R (1990) Frogs into Princes – Neuro Linguistic Programming Psychotherapy. Middlesex UK: Eden Grove Editions.
- [23] Bandler, R and Grinder, J (1975) The Structure of Magic I. A Book about Language and Therapy. Palo Alto CA: Science and Behavior Books.
- [24] Grinder, J and Bandler, R (1976) The Structure of Magic II. A Book about Communication and Change. Palo Alto CA: Science and Behavior Books.

- [25] Grinder, J, Bandler, R, DeLozier, J and Dilts, R (1980) *Neuro-Linguistic Programming: The Study of the Structure of Subjective Experience*, Volume I. Capitola, CA: Meta Publications.
- [26] Tolkien, J R R (1979) *The Silmarillion*. London UK: Unwin Paperbacks.
- [27] Wikipedia the Free Encyclopedia: Meditation (this page was last modified 15:41 on 20 November 2007). URL: <http://en.wikipedia.org/wiki/Meditation> [Accessed 20 November 2007].
- [28] Easwaran, E (1991) *Meditation: A Simple Eight Point Program for Translating Spiritual Ideals into Daily Life*. Petaluma CA: Nilgiri Press Books.
- [29] Conze, E (1972) *Buddhist Wisdom Books*. New York NY: Harper.
- [30] Harmsen, B (2001) *Mantra Meditation*. URL: <http://ourworld.compuserve.com/homepages/har/mm.htm#M1> [Accessed 11 February 2005].
- [31] Selye, H; Monat, A and Lazarus, R (editors) (1991) *Stress and Coping: History and Present Status of the Stress Concept*. New York NY: Columbia University Press.
- [32] Wavelength South East (2007) *Hypnotherapy*. URL: <http://www.wavelength-se.com/hypnotherapy.html> [Accessed 6 October 2007].
- [33] Morton, R (1980) *Hypnosis and Pastoral Counseling*. Los Angeles CA: Trade Paperback.
- [34] Durbin, P G (2005) *History of Hypnosis: Chaplain Paul G Durbin, PhD*. URL: <http://www.durbinhypnosis.com/historyofhypnosis.htm> [Accessed 25 May 2005].
- [35] *Ancient Greek Oracles*. URL: <http://www.archaeonia.com/religion/oracles.htm> [Accessed 25 May 2005].
- [36] Haddad, S (2005) *Hypnothera: Hypnosis Today*. URL: <http://www.hypnothera.com/English/hypnosis/hpnhistry.html> [Accessed 25 May 2005].
- [37] Kermack, P (2005) *Silver Dolphin: The History of Hypnosis*. URL: <http://www.silver-dolphin.co.uk/index.php?ID=history> [Accessed 13 May 2005].
- [38] *Aesculapius Books: About Aesculapius*. URL: <http://aesculapbooks.com/abaes.html> [Accessed 25 May 2005].

- [39] Lee, F J T (1999) *Philosophical Dialogues VII: Essence and Existence: Franz Mesmer, Avicenna and Averroës*. URL: http://www.geocities.com/juttafranz/dialog_007.html [Accessed 27 May 2005].
- [40] Breakthrough Institute (2005) *Historical Overview of Hypnosis: Early History*. URL: http://www.breakthroughinstitute.com/history_of_hypnosis.htm [Accessed 13 May 2005].
- [41] Newton, D (2002) *My Week as a Dervish*. URL: <http://www.oriscus.com/dn/dervish/> [Accessed 25 May 2005].
- [42] Skallagrimsson, W (2005) *Uppsala: Seidh Trance*. URL: <http://www.winterscapes.com/upsala/seidh.htm> [Accessed 25 May 2005].
- [43] *New Advent: Catholic Encyclopedia: St Edward the Confessor*. URL: <http://www.newadvent.org/cathen/05322a.htm> [Accessed 03 June 2005].
- [44] *The Bible: Revised Standard Version: Last Updated 18 February 1997*. URL: <http://www.hti.umich.edu/r/rsv/> [Accessed 25 August 2005].
- [45] Stott, J and Coote, R T (editors) (1980) *Down to Earth*. Grand Rapids MI: Eerdmans.
- [46] Longman Jr, R (2003) *Hypnosis: Version 23 June 2005*. URL: <http://www.spirithome.com/parahypn.html> [Accessed 05 July 2005].
- [47] Debus, A G (2005) *Paracelsus and the Medical Revolution of the Renaissance: A 500th Anniversary Celebration*. By Allen G Debus: Morris Fishbein Professor of the History of Science and Medicine The University of Chicago. URL: http://www.nlm.nih.gov/exhibition/paracelsus/paracelsus_2.html [Accessed 03 June 2005].
- [48] Edmunds, S (1972) *Hypnotism and Psychic Phenomena*. North Hollywood CA: Wilshire Book Company.
- [49] Marwick, M (1970) *Witchcraft and Sorcery*. Baltimore MD: Penguin Books Incorporated.
- [50] Russell, J B; Lehmann, A C and Myers, J E (editors) (1989) *Magic, Witchcraft, and Religion: Witchcraft*. Mountain View CA: Mayfield Publishing Company.
- [51] *A Brief Expose of Witchcraft*. URL: <http://home.computer.net/~cya/cy00040.html> [Accessed 16 May 2005].

[52] Oullette, O (2005) Doculink International: Deliverance for Yourself and Others. URL: http://www.healthrecipes.com/book_2.htm [Accessed 16 May 2005].

[53] Botsford, D (2005) Rapid Variable Stress Management. *The Hypnotherapy Journal* Volume 4, Issue 5, Winter 2005, pp 15 – 23.

[54] Bernardi, L, Sleight, P, Bandinelli, G, Cencetti, S, Fattorini, L, Wdowczyk-Szulc, J and Lagi, A (2001) Effect of Rosary Prayer and Yoga Mantras on Automatic Cardiovascular Rhythms. *British Medical Journal* 323 (7327), 1446 – 1449.

[55] Longman Jr, R (2007) Hypnosis, Hypnotism, and Suggestion: Version 20 January 2007 . URL: <http://www.spirithome.com/hypnosis.html> [Accessed 14 November 2007].

[56] Aschkenasy, N (1986) *Eve's Journey*. Pittsburgh: PA: University of Philadelphia Press; *Genesis of Eden Diversity Encyclopedia*. URL: <http://www.dhushara.com/book/orsin/evej.htm> [Accessed 15 June 2005].

[57] New York Awareness Center (2006) How Does Your Brain Operate? What Happens in Hypnosis? What is the Function of the Various Brainwaves? URL: http://www.newyorkawareness.com/your_mind_in_hypnosis.asp [Accessed 8 October 2007].

[58] De Giorgio, L (2004) *School for Wizards: Hypnosis for Kids: What are Brainwaves?* URL: <http://www.hypnosis-kids.com/brainwaves.htm> [Accessed 8 October 2007].

[59] Global Health Products Limited (2006) *Brain Wave Entrainment and Health: High Quality Hypnosis CDs and Health Products*. URL: <http://www.hypnosis-and-health.com/brain-wave.html> [Accessed 8 October 2007].

[60] Brainwave Frequency Research Findings. URL: <http://members.aol.com/networktcp/research/freq.htm#List1> [Accessed 8 October 2007].

[61] Greene, J (2007) Why Brainwave Synchronization Can Be Bad. URL: <http://www.geocities.com/jeremygreene70/brainwav.htm?20076> [Accessed 8 October 2007].

[62] Hawkins, M (2007) Old Soul or New? Our Logical Self is Only One Tenth of Who We Are: New to Hypnotherapy and Hypnosis? URL: <http://www.melodiehawkins.com/page13.html> [Accessed 8 October 2007].

[63] Sowell, J (2007) Energy Healing for Body, Mind, and Spirit: ThetaHealing: Consciously Using Brainwaves to Bring Change. URL: http://thetainstitute.com/article.theta_brainwaves.html [Accessed 8 October 2007].

[64] Wikipedia the Free Encyclopedia: Hypnosis (this page was last modified 16:59 on 11 May 2005). URL: <http://en.wikipedia.org/wiki/Hypnosis> [Accessed 16 May 2005].

[65] De Giorgio, L (2004) School for Wizards: Hypnosis for Kids: What is Brainwave Synchronization? URL: <http://www.hypnosis-kids.com/brainwave-synchronization.htm> [Accessed 8 October 2007].

[66] Harris, B (2007) Centerpointe Research Institute: The Science Behind Holosync and Other Neurotechnologies using Binaural Beats: A Revolution in Neuroscience: Tuning the Brain. URL: http://www.centerpointe.com/about/articles_research.php [Accessed 8 October 2007].

[67] Wikipedia the Free Encyclopedia: Magical Thinking (this page was last modified 07:10 on 16 November 2007). URL: http://en.wikipedia.org/wiki/Magical_thinking [Accessed 20 November 2007].

[68] Padilla, R C (1989) Missions in the 1990s: View II. International Bulletin of Missionary Research 13 (October). pp 149 – 152.

[69] Reisser, P C, Reisser, T K and Weldon, J (1987) New Age Medicine. Downers Grove IL: InterVarsity.

[70] Jones, S (2007) The Brain Project: Notes on the Cybernetics of Language and Video. This is an HTML version of a small book self-published in Sydney, August 1979. Much of what it offers is still relevant to discussions of the mind today. URL: http://www.culture.com.au/brain_proj/content/cybern1.htm [Accessed 4 December 2007].

[71] The Mystica: As Above, So Below. URL: http://www.themystica.com/mystica/articles/a/below_above.html [Accessed 27 May 2005].

[72] Sørensen, J (2007) A Cognitive Theory of Magic: Chapter 4. Magical Rituals and Conceptual Blending. URL: <http://cogsci.ucsd.edu/~faucon/253/sorensen.4.pdf> [Accessed 14 March 2007]; Sørensen, J (2006) A Cognitive Theory of Magic. Lanham MD: Altamira.

[73] Battino, R and South, T L (2005) Ericksonian Approaches: A Comprehensive Manual. Carmarthen UK: Crown House Publishing.

[74] Jemmer, P (2007) Miltonian Metaphors for Hypnotic Induction. The Hypnotherapy Journal. Summer 2007, Issue 2, Volume 7, pp 29 – 30.

- [75] Jemmer, P (2007) Metaphor Corner: Coming and Going. *The Hypnotherapy Journal*. Spring 2007, Issue 1, Volume 7, p 34.
- [76] Jemmer, P (2007) Artful Ericksonian Trance Inductions. *Fidelity: The Journal for the NCP*. Spring 2007, Edition 27, pp 31 – 35.
- [77] Jemmer, P (2005) An Introduction to Induction using Ericksonian Language Patterns. *The Hypnotherapy Journal*. Winter 2005, Issue 3, Volume 5, pp 11 – 13.
- [78] Jemmer, P (2004) Methodical Meta and Magical Milton Models: Language and the Nature of Therapeutic Transformation. *Fidelity: The Journal for the NCP*. Summer 2004, Edition 16, pp. 7 – 10.
- [79] Pederson, J (1926) *Israel: Its Life and Culture*. London UK: Oxford University Press.
- [80] LaVey, A S (1969) *The Satanic Bible*. New York NY: Avon.
- [81] Beyer Jr, T (1995) Andrej Bely's Glossolalija: A Berlin Glossolalia. *Europa Orientalis XIV*, 2, pp 7 – 25.
- [82] Haraway, D (1991) *Simians, Cyborgs and Women The Reinvention of Nature: A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century*. New York NY: Routledge.
- [83] Horkheimer, M and Adorno, T; Cumming, J (translator) (1972) *Dialectic of Enlightenment*. New York NY: Herder and Herder.
- [84] Jemmer, P (2007) 'De Tractatu Magicarum Linguarum' – On Dealing with the Magical Spells (of Psycho-chaotic Semiotics). *European Journal of Clinical Hypnosis*. Volume 7, Issue 4 (in press).
- [85] Jemmer, P (2006) Beliefs, Values and the Vacuum of Choice. *European Journal of Clinical Hypnosis*. Issue 4, Volume 6, pp 16 – 21.