Chapter 15
The Vital Force "Reincarnated": Modeling Entelechy as a Quantized Spinning Gyroscopic Metaphor for Integrated Medicine

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Abstract The ancient concept of the Vital Force receives a modern incarnation as a metaphorical multidimensional spinning gyroscope. The consequences for a different understanding of health and disease are examined in the context of integrated medicine.

Keywords Vital Force • Gyroscope • Wave functions • Homeopathy • Conventional medicine

15.1 Introduction

Integrative healthcare assumes that for the sake of our patients, conventional medicine and complementary and alternative medicine (CAM) find some common ground. The problem, however, is that conventional medicine is dominated by reductionism, a purely mechanistic epistemology, and scientism [1–10]. Thus, only physically identifiable manifestations of disease are considered "real," as they are the ones observable via the five senses.

Many CAMs (e.g., homeopathy) adopt a more holistic epistemology, which embraces the venerable notion of entelechy: that an essentially embodied but nonphysical (and therefore not directly observable) Vital Force (Vf) propels an organism towards self-fulfillment, e.g., health [11].

One way to meld these opposing epistemologies is to model entelechy using the multidimensional discourse of quantum theory. This is because, ". . .. it is possible for quantum properties (e.g., a particle's wave function) to be physical but not directly observable or measurable." Also, "a wave function contains within it all

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that can possibly be known about a system by observation, not its ontological reality, separate from the observer" [12]. Based on these insights, this paper proposes a metaphor for the Vital Force (Vf) as a multidimensional quantized spinning gyroscope [13].

15.2 The Vital Force (Vf) and Complexity

The Vital Force (Vf) bears striking similarities to *qi* or *chi* of Chinese acupuncture and *Prana* of Asian spiritual practices. From conventional medicine's reductionist viewpoint, the Vf is treated with contempt because "it doesn't have any identifiable source . . . obey any kind of (physical) law, it can't be defined; it is simply postulated ad hoc to explain whatever effects or alleged effects need explaining: it can't be pinned down or put to the question; its function is to provide the illusion of meaning without substance. . . . It can't be disproved because it is too amorphous and vague a concept [14]."

However, complex systems are known to self-organize, are open, and possess a wholeness that cannot be attributed solely to any particular part or subsystem [13]. Nondeterministically, the Vf might be considered as an emergent property of billions of living cells, which generates an all-pervading field that by feedback so organizes the totality's elements that it reinforces itself. This field would not originate in any one cell or body part, and being resultant of the whole organism, resists any dissipative entropic influence [15].

Such a holistic view of the Vf bares phenomenological comparison with conclusions derived from quantum physics [12, 16]. Thus, the Vf is not directly ascertainable: it is only observed indirectly through the symptoms it produces [17]. Similarly, in quantum theory, the *wave function* (a multidimensional mathematical descriptor of a quantum system's state) may only be inferred from the effects it produces in our reality [12, 18]. This is because of the multidimensional mathematical language used to describe wave functions [19].[1] Thus, trying to visualize a multidimensional quantum state in usual three-dimensional (3-D) terms [20, 21] leads to loss of information—like trying to squeeze a three-dimensional cube into a two-dimensional plane: information invariably gets lost, notably, in this case, the cube's three-dimensionality—and one reason why quantum entanglement seems so paradoxical [12].

[1] This uses complex numbers of the type $a + ib$, where a and b are real and $i = \sqrt{-1}$, is imaginary, i.e., a solution of $\sqrt{-1}$ does not exist within the scope of the real numbers. The use of complex numbers allows access to mathematically higher dimensional spaces than are available to the set of real numbers, which are a sub-set of complex numbers.

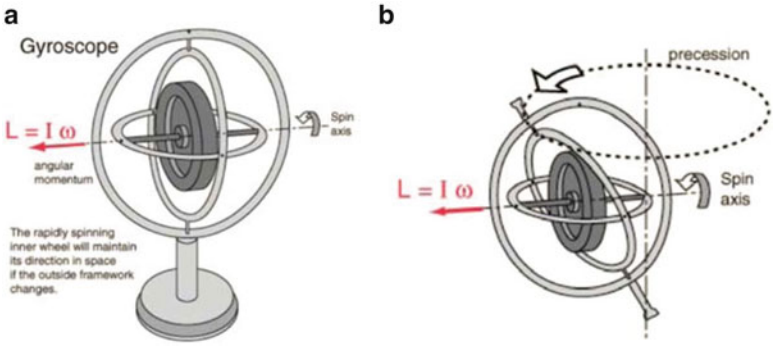

Fig. 15.1 (**a**) A type of gyroscope made by suspending a relatively massive rotor inside three rings called gimbals. Mounting each of these rotors on high-quality bearing surfaces insures that very little torque can be exerted on the inside rotor. (**b**) If a gyroscope is tipped, the gimbals try to reorient to keep the rotor spin axis in the same direction. If released in this orientation, the gyroscope will precess in the direction shown because of the torque exerted by gravity on the gyroscope

15.2.1 A Gyroscopic Model of the Vital Force

Based on the above conjectures, it is possible to develop a metaphor of the Vf as if it behaved like a gyroscopic entity. This utilizes the well-known properties of spinning tops and gyroscopes to illustrate the actions of the Vf in response to disease and remedies [13] (Figure 15.1 represents a more complex form of gyroscopic mounting but the same principles apply).

Thus, once set spinning at high speed, the angular momentum generated causes tops and simple gyroscopes to stand erect with respect to the Earth's gravitational field and will strongly resist any external lateral forces that try to topple the gyroscope (Fig. 15.2).

If those forces are strong enough, they will cause it to wobble about its spinning axis before the gyroscope settles back into its upright position. Also, any object attached to the rapidly spinning flywheel will be thrown outward. As the flywheel slows, the gyroscope wobbles again but now tilts over and rotates slowly about a vertical axis. This slow rotation of the gyroscope's spinning axis is called precession: The slower the flywheel spins, the faster the precession of the whole gyroscope, until it eventually topples over completely. A precessing gyroscope resists lateral forces far less strongly.

A healthy Vf may be likened to a fully upright (multidimensional) gyroscope with a rapidly spinning flywheel with one major exception: changes in the Vf "gyroscopic" angular velocity of precession do not occur smoothly but *in jumps*, i.e., *it is quantized*. Imagined as physical but not observable when healthy, the Vf gyroscope "spins" unobserved in an upright position. When diseased, however, the Vf "precesses," betraying the physical part of its existence by "throwing out" symptoms in our reality.

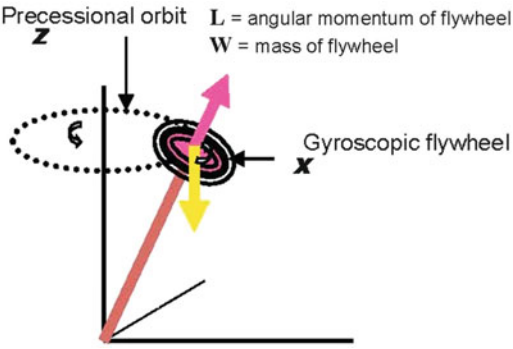

Fig. 15.2 Schematic of simple gyroscope and its forces, $L =$ angular momentum of flywheel, $W =$ mass of flywheel

Lateral forces, therefore, are akin to those stressors that can push the organism into disease states that are resisted easily by a healthy Vf and thrown off centrifugally to the organism's extremities. Acute disease expression may be likened to the wobbling of the Vf gyroscope after being acted upon by a strong force, prior to the Vf gyroscope resuming its healthy upright stance. A weaker Vf, however, is more like a gyroscope whose flywheel has slowed down so that it is less stable in an upright position. In this situation, the Vf is less able to resist those stressors that push the organism over into disease states.

Consequently, as the Vf begins to precess (i.e., express symptoms of disease): the greater the amount of precession, the more chronic the disease state and the greater its symptom expression will be. And the slower the Vf gyroscope's "flywheel" spins, the less able it is to throw off the disease.

Within this qualitative metaphor, the therapeutic homeopathic remedy can be seen as the force that, when applied to the Vf gyroscope's flywheel, causes it to speed up, spin faster, and throw off the disease state. Also, the term "disease" may be applied to those inherited and environmental stressors that could exert a braking effect on the Vf gyroscope's flywheel. These would include constitutional factors that could give rise to "friction in the bearings" (e.g., inherited imperfections in the Vf gyroscope's manufacture) and environmental factors giving rise to "friction on the fly-wheel" (e.g., poor diet, housing, and air quality, and dysfunctional relationships.) [13].

Further, in this metaphor, diseases and therapeutic modalities are envisaged as torque-like "vectors" that, respectively, "brake" or "accelerate" the quantized Vf gyroscope's rate of spin. The former causes the Vf to "precess," eliciting symptoms in our reality: the latter corrects precession by accelerating the Vf, which "throws off" the disease and restores health. This metaphor therefore, illustrates how diseases and therapeutic modalities have a mirror-like relationship, and suggests conventional medicine's homeostatic immune system might be seen as a physical projection of CAM's more general multidimensional Vf.

15.2.2 Developing the Vf Gyroscopic Model

1. *Assumptions*: so, to recap, the model of the Vf in terms of a quantized gyroscope [22] is based on three main assumptions:
   (a) *An individual's Vf can be imagined as behaving like a gyroscope*: *The faster it* "spins" *on its axis*, *the more easily it resists the effects of disease*. From this perspective, a Vf vector, **Vf** can be equated algebraically with the precessing angular momentum, $\mathbf{L_s}$ of a gyroscope. And like the magnitude of $\mathbf{L_s}$, L_s, the magnitude of **Vf**, *V*f, is inversely proportional to a gyroscopic precessional velocity, Ω so that, $\Omega = 1/V\text{f}$. Thus within certain limits, and just like a real gyroscope, the faster the Vf's angular velocity of precession (i.e., the slower its rate of spin about its "axis" and therefore the smaller its angular momentum), the weaker the *V*f.
   (b) *These changes in gyroscopic angular momentum corresponding to changes in the Vf's state of health do not occur smoothly but in a stepwise* ("quantized") *manner*. What this means is that, unlike a real mechanical gyroscope, the theoretical Vf gyroscope is not observed to experience gradual decreases and increases of its spin angular momentum. Similar to the way orbiting electrons in atoms are thought to jump instantaneously between energy levels when absorbing and emitting quanta of energy, the Vf jumps between states of health depending on its reaction to "quanta" of diseases and remedies.
   (c) *This idea can be extended to define mathematical operators that describe how these changes in a Vf's angular momentum/state of health are brought about by disease states and remedies*. In fact, these mathematical operators may be written algebraically in a manner similar to angular momentum shift operators used in the QT to describe the physics of electrons in atoms [23]. These are called Vital Force shift operators, and they elicit responses from the Vf that increase (i.e., remedy) or decrease (i.e., disease) its angular momentum/state of health. These Vf shift operators are derived from complementary complex number combinations [19] of the primary and secondary symptoms expressed by the Vf as experienced by the patient [22].
2. *Vf* "gyroscope" *wave function*: the totality of observed primary symptoms we shall denote as equal to $k_1\Sigma\sigma_1$, while the totality (hence the sign Σ, which means "sum") of observed secondary symptoms expressed by a Vital Force (Vf) shall be denoted as equal to $ik_2\Sigma\sigma_2$. Thus the Vf shift operators may be defined as:

$$V_+ = k_1\Sigma\sigma_1 + ik_2\Sigma\sigma_2 \text{ and } \mathrm{V}_- = k_1\Sigma\sigma_1 - ik_2\Sigma\sigma_2$$

   where $i = \sqrt{-1}$, and k_1 and k_2 are, for the time being, arbitrary constants of proportionality. This representation of the shift operators economically incorporates the complementarity of primary and secondary symptoms.

The terms "primary" and "secondary symptoms" here refer to the essential dual biphasal nature of the remedy as has been noted by previous authors [24, 25]. "Biphasal" means that a remedy is observed to exhibit the so-called primary symptoms followed by more lasting secondary symptoms. A closely related concept here is that of "hormesis" meaning a generally favorable biological response to low exposures to toxins and other environmental stressors. Such toxins/stressors demonstrating hormesis thus have the opposite effect in small doses as in large doses [26].

These primary and secondary effects are generally taken to be of equal value, although some authors have favored the longer-lasting secondary symptoms as being more useful to the physician because they are thought to have more to do with the response of the Vf to the remedy (in conventional medicine, these secondary effects might be equated roughly with so-called side effects).

The primary–secondary sequence can reverse depending on many factors, including susceptibility, potency, and time phases [25]. However, what it is important to realize is that it is not so much the sequence, but the fact that the remedy produces a *complementary duality* of symptoms: It is only by observing this complementarity that a remedy's totality of action can be fully understood. This duality is contained within the algebraic derivation of the Vf shift operators in terms of complex numbers [19, 22].

In terms of the Vf gyroscope model presented here, the constant k_2 may be thought to contain within it expressions of the energy and the "moment of inertia" of the Vf gyroscope. A similar analysis of k_1 shows it to be related to the power of Vf to resist external influences (i.e., disease): The larger k_1 is, the less the Vf "gyroscope" is troubled by external influences.

Following on from this, it is possible to derive a "wave function" Ψ_{Vf} for the Vf, which relates it solely to the totality of secondary-symptom observables (i.e., $\int \Sigma\sigma_2 = S_2$) and bears striking similarities to the wave function for a quantized rotating object [22] (see Fig. 15.3).

$$\Psi_{\mathrm{Vf}} \;=\; A\left(\mathrm{e}^{ik_2 S_2} \;+\; \mathrm{e}^{-ik_2 S_2}\right) \;=\; 2A\cos k_2 S_2$$

In addition, this analysis was able to show that remedies (**Rx**) may also be represented by wave functions of the form $\Psi_{\mathrm{Rx}} = \mathrm{e}^{-\mathrm{i}k_2 \Delta S_2}$ (where ΔS_2 refers to the overall change in the totality of secondary symptoms wrought by the remedy). Thus when the remedy is completely curative, $\Delta S_2 = S_2$ and $\Psi_{\mathrm{Rx}} = \mathrm{e}^{-ik_2 S_2}$.

If the remedy does not cause any change in secondary symptoms, then $\Delta S_2 = 0$, and $\Psi_{\mathrm{Rx}} = \mathrm{e}^{-ik_2 \Delta S_2} = \mathrm{e}^0 = 1$.

3. *The effect of the correct therapeutic remedy*: the effect of the correct therapeutic remedy Rx at the right potency is given by the product of Ψ_{Vf} and Ψ_{Rx} which leads to a boost to Vf written as $\Psi_{\mathrm{Vf+\Delta Vf}}$:-

   So, $\Psi_{\mathrm{Vf+\Delta Vf}} = \mathrm{A}(\mathrm{e}^{\mathrm{i}k_2 S_2} + \mathrm{e}^{-\mathrm{i}k_2 S_2})\mathrm{e}^{-\mathrm{i}k_2 \Delta S_2}$.

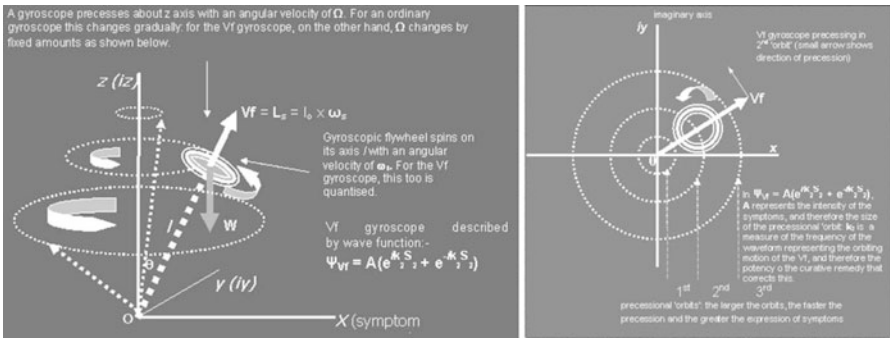

Fig. 15.3 Schematic of Vf "gyroscope" precessing in fixed quantized "orbits" of decreasing health. This shows that the wave function is related solely to a set of observables—the totality of secondary symptoms, S_2

Consequently, when the remedy is completely curative, $S_2 = 0$ and $\Delta S_2 = S_2$ and substituting, we get.

$$\Psi_{\mathrm{Vf}+\Delta\mathrm{Vf}} = 2A$$

Which means no more symptoms are shown = a healthier, faster spinning, 'upright' **Vf**. The conditions, however, have to be precise: *the right Rx at the right potency*.

4. *Homeopathic aggravation*: here the patient (**Px**) aggravates or "proves" the remedy (i.e., produces symptoms of the remedy)? This is the situation when the remedy cures, i.e., $S_2 = 0$ but now $\Delta S_2 > S_2$.

   So, substituting in $\Psi_{\mathrm{Vf}+\Delta\mathrm{Vf}} = A(\mathrm{e}^{ik_2 S_2} + \mathrm{e}^{-ik_2 S_2})\mathrm{e}^{-ik_2 \Delta S_2}$ we get....

$$\Psi_{\mathrm{Vf}+\Delta\mathrm{Vf}} = 2A\mathrm{e}^{-ik_2 \Delta S_2},$$

   i.e., the Rx has removed the original Sx but now added some of its own, aka "proving" Sx. This is equivalent to speeding up the Vf gyroscope too quickly: it wobbles violently before settling into its new higher, healthier rate of spin.

5. *Curative remedy at the wrong potency*: not all the symptoms are cleared, and this is the situation when $S_2 \neq 0$ and now $\Delta S_2 < S_2$.

   So, substituting in $\Psi_{\mathrm{Vf}+\Delta\mathrm{Vf}} = A(\mathrm{e}^{ik_2 S_2} + \mathrm{e}^{-ik_2 S_2})\mathrm{e}^{-ik_2 \Delta S_2}$ we get....

$$\Psi_{\mathrm{Vf}+\Delta\mathrm{Vf}} = A\left(\mathrm{e}^{ik_2\left(S_2 - \Delta S_2\right)} + \mathrm{e}^{-ik2\left(S_2 - \Delta S_2\right)}\right) \backslash$$

   i.e., not all the Sx are removed and the Vf is still precessing. Thus the right Rx has to be given at the right potency for complete cure to proceed. This is not easy: so safest way to proceed might be to remove Sx gradually. This might be a possible rationale for Hahnemann's invention and use of the LM potencies.

6. "Mirror-image" *relationship of diseases and remedies*: the remedy equation can be rewritten in polar form using Euler's transformation:

$$\Psi_{\mathrm{Rx}} = \mathrm{e}^{-ik_2\Delta S_2} = \cos k_2\Delta S_2 - i\sin k_2\Delta S_2$$

where k_2 is related to *remedy potency*. This shows the remedy can be represented as a *complex number* with a real (i.e., $\cos k_2\Delta S_2$) and an imaginary (i.e., $i\sin k_2\Delta S_2$) part. If disease is intimately related to the remedy (at the right potency) that cures it—they are like mirror images of each other. So in mathematical terms, the disease is the complex conjugate—"mirror image"—of the remedy which will be:

$$\Psi_{\mathrm{Dx}} = \mathrm{e}^{ik_2\Delta S_2} = \cos k_2\Delta S_2 + i\sin k_2\Delta S_2$$

Therefore, multiplying remedy and disease "wave functions" essentially cancels them out, i.e.,

$$\Psi_{\mathrm{Rx}}.\,\Psi_{\mathrm{Dx}} = \mathrm{e}^{-ik_2\Delta S_2}.\,\mathrm{e}^{ik_2\Delta S_2} = \mathrm{e}^{0} = 1$$

which is the same as writing $(\cos k_2\Delta S_2 - i\sin k_2\Delta S_2).(\cos k_2\Delta S_2 + i\sin k_2\Delta S_2) = 1$

The remedy Rx can be regarded as acting as an *accelerating torque* speeding up the Vf "gyroscope," while the disease Dx acts as a braking torque slowing it down. So, the right remedy at the right potency "cancels" out the effect of the disease.

15.2.3 A Model for the Homeostatic Immune System

Conventional medicine has no concept of an all-pervading Vf. In homeopathy, the goal of treatment is to help the Vf to throw off the disease (e.g., as in the Vf gyroscopic model). In contrast, conventional medicine recognizes a homeostatic immune system: its drug regimes, however, are less concerned with supporting it and more concerned with alleviating symptoms. In homeopathy, this is believed to be the cause of conventional drug side effects, as the Vf reacts against the drug's initial suppression of symptoms [24].

Depicting the Vf and remedies as wave functions implies a certain periodicity in their properties and behavior. This can indeed be exhibited by the Vf in its expression of symptoms, with their strength varying according to periodic modalities, such as the time of day.

Interestingly, there is some experimental evidence that biologically active substances at different serially diluted (and agitated) potencies will have periodic effects on their substrates. For example, Schiff reports alternating effects of different ultradiluted potencies of anti-immunoglobulin E (aIgE) on the decolorization of stained basophils, in most cases when the aIgE had been diluted and agitated beyond molecular existence [27]: some potencies enhance decolorization while others retard it. Schiff claimed this as evidence for the water memory effect.

Accordingly, k_2 values determine the periodicity of the Vf and remedy wave functions. As this constant is also associated with remedy potency (which is

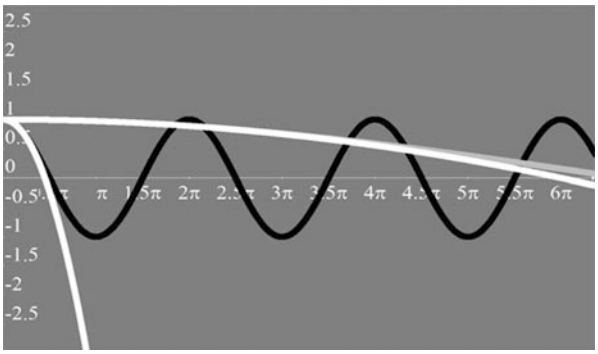

Fig. 15.4 Plots of the real part of $\Psi_{Rx} = e^{-ik_2\Delta S_2} = \cos k_2\Delta S_2 - i\sin k_2\Delta S_2$ ($k_2 = 1$; *black curve*: $k_2 = 0.075$; shallow *gray curve*), and $\Psi_{Rx} = \cos\ k_2\Delta S_2 \approx 1 - [k_2\Delta S_2]^2/2!$ ($k_2 = 1$; steep white curve: $k_2 = 0.075$; shallow *white curve*)

inversely proportional to material dose), it is interesting to investigate the possible effects of very low remedy k_2 values on the periodicity of Ψ_{Rx}.

From the previous section, we saw that the remedy wave function can be written in polar form:-

$$\Psi_{Rx} \ = \ e^{-ik_2\Delta S_2} \ = \ \cos k_2\Delta S_2 - i \sin k_2\Delta S_2$$

which means that the remedy wave function is represented as a *complex number* with a real ($\cos k_2\Delta S_2$) and an imaginary ($i\sin k_2\Delta S_2$) part. The real part is periodic and is shown as the black and gray lines in Fig. 15.4.

Crucially, what this means is that because k_2 is associated with remedy potency, and by representing the remedy as a wave function, *it should remain effective regardless of its material dose* (*potency*), *assuming it is correctly matched according to the law of similars*, i.e., *the prediction of homeopathy* (black and gray lines in figure).

Now, in mathematics, periodic functions can be expanded as power series, e.g.,

$$\cos\theta \ = \ 1 - \theta^2/2! \ + \ \theta^4/4! \ - \theta^6/6! \ + \ \ldots.(-1)^n\theta^{2n}/(2n)!$$

where $\theta = k_2\Delta S_2$. This means that as θ becomes very small, (i.e., as k_2 tends to 0) then in the remedy wave function, the imaginary part *is* in$\theta \approx 0$ and $\cos\theta \approx 1 - \theta^2/2!$ We can see in Fig. 15.4 (the white lines) that when this happens $\cos\theta$ is no longer a periodic wave function.

Low remedy potency in homeopathy means the remedy is in a material dose. Thus, as k_2 tends to 0 *because* $\cos k_2\Delta S_2 \approx 1 - (k_2\Delta S_2)^2/2!$ *is NOT a wave function*. In fact, as Fig. 15.4 shows, as k_2 tends to 0, the shallow gray and white lines are virtually indistinguishable. So, by making this approximation, we can see why only being used to dealing with remedies in material doses, conventional medicine might

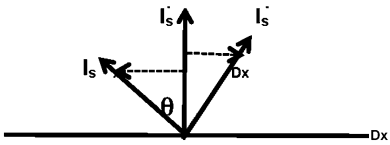

Fig. 15.5 Force diagram model showing the homeostatic immune system (**I_s**) disturbed by disease (**Dx**) and remedy (**Rx**) The line represents the totality of symptoms *n* expressed by I_s: to the right are disease symptoms; to left remedy "side effects"

conclude that *the remedy will NOT be effective in a non-material dose*, *as homeopathy claims*.

Conventional medicine has no concept of an all-pervading Vf. In homeopathy, the goal of treatment is to help the Vital Force to throw off the disease (e.g., as in the Vf gyroscopic model). In contrast, conventional medicine recognizes a homeostatic immune system: Its drug regimes, however, are less concerned with supporting it and more concerned with alleviating symptoms. In homeopathy, this is believed to be the cause of conventional drug side effects, as the Vf reacts against the drug's initial suppression of symptoms [24].

This situation in conventional medicine is represented simplistically by the force diagram in Fig. 15.5.

Here, a disease "vector" (**Dx**, dotted arrow to the right) acts on a homeostatic immune system "vector" (**Is**) by "deflecting" it to the right through angle φ. A drug "vector" is then prescribed (**Rx**, dotted arrow to the left) to alleviate symptoms, correcting the original angle of deflection, only to produce side effects, and a deflection in the opposite direction by angle θ.

It can be shown using a simplified mathematical derivation for the behavior of a homeostatic immune system under these circumstances, that:-

$$I_s = K(1 - \theta^2/2 + \theta^4/2.2! - \theta^6/2.3! \ldots)$$

Where K is a constant of integration. For low values of θ, this relationship approximates to:-

$$I_s = K(1 - \theta^2/2)$$

Which bears a close relationship to the equation above, $\cos k_2 \Delta S_2 \approx 1 - (k_2 \Delta S_2)^2/2!$. In other words, *the mathematical models used to represent the Vf and the homeostatic immune system deliver similar approximations for very low drug potency* (i.e., for values of $k_2 << 1$ when a remedy/drug exists in material molecular form: see nearly coincidental gently sloping gray and white lines in Fig. 15.6). Only when the remedy is becoming ultradiluted (as k_2 becomes substantial), according to these models, do the predictions of conventional medicine and homeopathy diverge.

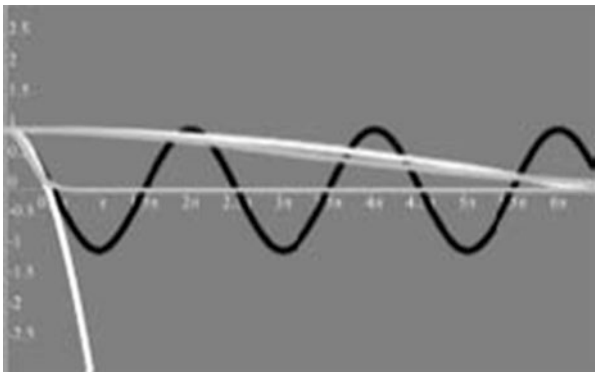

Fig. 15.6 Plots of the real part of $\Psi_{Rx} = e^{-ik_2\Delta S_2} = \cos k_2\Delta S_2 - i\sin k_2\Delta S_2$ ($k_2 = 1$; *black curve*), and $\Psi_{Rx} = \cos\ k_2\Delta S_2 \approx 1 - [k_2\Delta S_2]^2/2!$ ($k_2 = 1$; steep *white curve*: $k_2 = 0.075$; shallow *white curve*) and $I_s = K(1 - \theta^2/2 + \theta^4/2.2! - \theta^6/2.3!...)$ ($k_2\Delta S_2 \approx \theta$; $k_2 = 1$, steep *gray curve* flattening to 0: $k_2 = 0.005$; shallow *gray curve*)

Conclusion

In this paper, a model has been developed which depicts the Vf and potentised remedies as periodic wave functions. It turns out that at low potency (i.e., the remedy is at a physical material dose), these functions can be approximated in such a way as to lose their periodicity and therefore deliver predictions concerning the effects of highly diluted remedies that are in line with those of conventional medicine (i.e., they should have little or no effect).

In order to expand on this conclusion, another simple model was proposed, in which the conventional medical notion of a homeostatic immune system was treated as a simple force vector, deflected alternately by disease and remedy vectors. Thus, disturbance one way elicits symptoms of disease, while the disturbance the other way elicits symptoms of the remedy (i.e., "side effects."). The mathematical treatment of this simple model generates a solution whose interpretation is conventional medicine's prediction concerning the lack of efficacy of highly potentised substances. This, however, is the same prediction drawn from the Vf gyroscopic model concerning the efficacy of highly potentised remedies, when it is approximated to very low potency.

At this very early stage it might appear presumptuous, but parallels could be drawn here with the relationship between Newtonian and Einsteinian mechanics: The latter delivers the former when it is suitably approximated to velocities much smaller than light. Thus, Newton does not contradict Einstein: Rather, Newtonian mechanics is an approximation of Einsteinian mechanics, applicable at low velocities only. Similarly, it could be that there is no contradiction between conventional medicine and homeopathy: rather

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conventional medicine may perhaps be better understood as an approximation of homeopathy when remedies are given at low potencies in material doses. Thus, although this is only a preliminary model based on several admittedly unproven assumptions, more sophisticated mathematical treatments than the ones presented here might in future provide a platform for the possible unification of conventional medicine with homeopathy. Given the increasing skepticism being directed at homeopathy, it would indeed prove ironic if eventually conventional medicine turned out to be a subset of a much broader paradigm that included homeopathy [28–30]!

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