Integrating Polyvagal Theory in **Bioenergetic Therapy**



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Abstracts

Can Polyvagal theory and BA therapy integrate? Do both point to energetic connections of trauma-process and character formation? In BA, dorsal vagal nerve (DV) is the main organ for life-energy regulation and charge/discharge, Reich viewed Solar Plexus as DVs energy regulating core and saw the Orgasm Reflex as a main regulator of vagal flow, the energetic foundation in Lowens Bioenergetic Analysis, together with grounding, energetic view on character and new techniques to restore vagal flow and pulsation. Porges pointed to a ventral vagal branch (VV) oriented to a social source of safety. Vagal – brain connections are mostly bottom-up (80%). Sensing body interior – is called interoception and involves the whole vagal system. DV activates its brake function *only* in stress; DV tunes energetic flow and proliferation of energetic resources in *normal* function. DV pulsation is needed in pleasant body feelings. VV, SNS and positive emotion join *a common synchronized process in rest, action and challenge*. In traumatic crisis, character formation happens while the dorsal vagal system is de-vitalized and the mind is over activated. Implications for therapy are offered.

Keywords: energetic regulation, social safety, crisis response, therapeutic interventions

Integrando a Teoria Polivagal à Terapia bioenergética (Portuguese)

É possível integrar a teoria Polivagal com a terapia da AB? Apontarão ambas as teorias para conexões energéticas do processo do trauma e para a formação do caráter? Na BA, o nervo Vagal Dorsal (DV) é o órgão principal para a regulação de energia vital e de cargadescarga. Reich via o Plexo Solar como o núcleo da regulação de energia do DV, e o Reflexo do Orgasmo como o principal regulador do fluxo vagal – a base energética da Análise Bioenergètica de Lowen.- juntamente com o *grounding.e a* visão energética do caráter e novas técnicas de restauração do fluxo vagal e da pulsação. Porges postulou o ramo vagal ventral

(VV) como orientado para uma fonte social de segurança. Conexões Vago-cérebro são, em sua maioria, bottom-up.(80%). A percepção do interior do corpo é chamada de Intercepção, e envolve o sistema Vagal inteiro. O DV ativa a função de freio *somente* em situações de estresse., O DV ativa o fluxo energético e a proliferação de recursos energéticos, na função *normal*. A pulsação do DV é necessária em sensações de prazer corporal. VV, SNS e emoção positiva juntam-se *num processo sincronizado comum, no descanso, na ação e no desafio*. Em crises traumáticas, a formação do caráter ocorre quando o Sistema Vagal Dorsal está desvitalizado e a mente, super-ativada. Mostramos, também, as implicações para a terapia.

Intégration de la théorie polyvagale dans la thérapie bioénergétique (French) La théorie polyvagale et l'analyse bioénergétique peuvent-elles être intégrées? Indiquent-ils à la fois les connexions énergétiques du processus traumatique et la formation du caractère? Dans l'Analyse Bioénergétique, le nerf vague dorsal (DV) est l'organe principal pour la régulation de l'énergie vitale et la charge/décharge, Reich considérait le plexus solaire comme le noyau régulateur de l'énergie DV et voyait le réflexe orgasmique comme un régulateur principal du flux vagal, la base énergétique dans l'Analyse Bioénergétique de Lowen, ainsi que l'ancrage, la visualisation du caractère énergétique et de nouvelles techniques pour restaurer le flux vagal et la pulsation. Porges a souligné une voie vagale ventrale (VV) orientée vers une source sociale de sécurité. Les connexions vago-cérébrales sont principalement ascendantes (80%). La perception de l'intérieur du corps est appelée entéroception et implique l'ensemble du système vagal. Le DV n'active sa fonction de freinage qu'en cas de stress; La DV ajuste le flux d'énergie et la prolifération des ressources énergétiques dans des conditions normales. La pulsation DV est nécessaire dans les sensations corporelles agréables. La VV, le SNS et les émotions positives se réunissent dans un processus commun synchronisé de repos, d'action et de défi. Dans la crise traumatique, la formation du caractère se produit alors que le système vagal dorsal est dévitalisé et que l'esprit est hyperactivé. Des implications pour la thérapie sont proposées.

Integrazione della teoria polivagale nella terapia bioenergetica (Italian)

La Teoria Polivagale e l'Analisi Bioenergetica possono integrarsi? Studiano entrambe le connessioni energetiche del processo traumatico e della formazione del carattere? Nell'Analisi Bioenergetica, il nervo vago dorsale (DV) è l'organo principale per la regolazione dell'energia vitale e la carica/scarica. Reich considerava il plesso solare come nucleo regolatore dell'energia del DV e vedeva il riflesso dell'orgasmo come un regolatore principale del flusso vagale, Lowen prende in considerazione il fondamento energetico nell'Analisi Bioenergetica, insieme al grounding, alla visione energetica del carattere e alle nuove tecniche per ripristinare il flusso e la pulsazione vagale. Porges ha indicato un ramo vago ventrale (VV) orientato a una fonte sociale di sicurezza. Le connessioni vago-cerebrali sono per lo più bottom-up (80%). La percezione dell'interno del corpo è chiamata enterocezione e coinvolge l'intero sistema vagale. Il DV attiva la sua funzione di freno solo in caso di stress; il DV sintonizza il flusso energetico e la proliferazione delle risorse energetiche in condizioni normali. La pulsazione del DV è necessaria in sensazioni corporee piacevoli. VV, SNS ed emozioni positive si uniscono in un processo sincronizzato comune in riposo, azione e sfida. Nella crisi traumatica, la formazione del carattere avviene mentre il sistema vago dorsale è devitalizzato e la mente è iperattivata. Vengono offerte implicazioni per la terapia.

Die Integration der polyvagalen Theorie in die bioenergetische Therapie (German) Kann man die polyvagale Theorie und die bioenergetische Analyse miteinander integrieren? Sind beide auf die energetischen Bezüge des Traumaprozesses und der Herausbildung des Charakters ausgerichtet? In der bioenergetischen Analyse ist der dorsale Vagalnerv (DV) das Hauptorgan für die Regulation der Lebensenergie und der energetischen Ladung und Abfuhr. Reich betrachtete den Solarplexus als Kern der vagalen Energieregulation und sah im Orgasmusreflex den Hauptregulator des vagalen Flusses. Die energetische Ausrichtung der bioenergetischen Analyse, in Verbindungn mit dem grounding, stellt einen energetischen Blickpunkt auf den Charakter bereit sowie neue Techniken, um den vagalen Fluss und das Pulsieren wiederherzustellen. Porges hat einen ventralen vagalen Zweig (VV) als soziale Quelle von Sicherheit ausgemacht. Die vago-zerebralen Verbindungslinien laufen meist bottom-up (80%). Die Interozeption, das innere Körpergepür, bezieht das ganze Vagalsystem mit ein. Der DV aktiviert seine Bremsfunktion nur bei stress; unter normalen Bedingungen regelt er den Energiefluss und die Proliferation der energetischen Ressourcen. Für angenehme Körpergefühle ist das Pulsieren des DV notwendig. VV, SNS und positive Gefühle vereinen sich in einem verbundenen gemeinsamen Prozess, sowohl im Zustand der Ruhe als auch beim Handeln und bei Herausforderungen. In einer traumatischen Krise ist die Charakterformation aktiv, während das dorsale Vagalsystem devitalisiert und das Bewusstseine hyperaktiv ist. Schließlich werden Bezüge zur therapeutischen Praxis hergestellt.

Интеграция поливагальной теории в биоэнергетическую терапию (Russian) Могут ли интегрироваться поливагальная теория и БА терапия? Указывают ли обе теории на энергетические связи травматического процесса и формирования характера? В БА дорсальный блуждающий нерв (ДБ) является главным органом регуляции жизненной энергии и заряда/разряда, Райх рассматривал солнечное сплетение как ядро регуляции энергии ДБ и считал рефлекс оргазма главным регулятором вагального потока, энергетическую основу биоэнергетического анализа Лоуэна, а также заземление, энергетический взгляд на характер

и новые техники для восстановления вагального потока и пульсации. Поржес указал на вентральную вагальную ветвь (ВВ), ориентированную на социальный источник безопасности. Вагально-мозговые связи в основном идут снизу вверх (80 %). Ощущение внутреннего пространства тела называется интероцепцией и вовлекает всю вагальную систему. ДБ активирует свою тормозную функцию *только* в состоянии стресса; *в норме* ДБ регулирует энергетический поток и распространение энергетических ресурсов. Пульсация ДБ необходима для приятных телесных ощущений. ДБ, ВНС и положительные эмоции объединяются в общий синхронизированный процесс в состоянии покоя, активности и вызова. При травматическом кризисе формирование характера происходит в то время, когда дорсальная вагальная система лишена энергии, а ум чрезмерно активизирован. Предлагаются способы применения в терапии.

Integración de la teoría polivagal en la terapia bioenergética (Spanish)

¿Es posible integrar la teoría polivagal con la terapia bioenergética? ¿Ambas teorías señalan las conexiones energéticas en los procesos de trauma y la formación del carácter? En el análisis bioenergético, el nervio vago dorsal (DV) es el órgano principal para la regulación de la energía vital y los procesos de carga/descarga. Reich identificó el plexo solar como el núcleo regulador del DV y consideró el reflejo orgásmico como un regulador esencial del flujo vagal, una base energética que Lowen incorporó en el análisis bioenergético junto con el enraizamiento, una perspectiva energética del carácter y nuevas técnicas para restaurar el flujo vagal y la pulsación. Por su parte, Porges identificó una rama ventral del nervio vago (VV) orientada hacia una fuente social de seguridad. Las conexiones entre el nervio vago y el cerebro son mayormente ascendentes (80%). La percepción del interior del cuerpo, conocida como interocepción, involucra a todo el sistema vagal. El DV activa su función de freno únicamente bajo estrés, pero en condiciones normales regula el flujo energético y la proliferación de recursos energéticos. La pulsación del DV es esencial para las sensaciones corporales placenteras. El VV, el sistema nervioso simpático (SNS) y las emociones positivas se sincronizan en procesos comunes durante el descanso, la acción y los desafíos. Durante una crisis traumática, la formación del carácter ocurre mientras el sistema vagal dorsal se desvitaliza y la mente se sobreactiva. Este análisis propone implicaciones para la terapia a partir de estas conexiones.

将多迷走神经理论融入躯体动力分析治疗 (Chinese)

Polyvagal理论与BA疗法能否整合?两者都指向创伤过程和人格形成的能量性连接吗?在躯体动力分析中,背侧迷走神经(DV)是生命能量调节和充电/放电的主要器官,赖克将太阳神经丛视为多迷走神经的能量调节核心,并将性高潮反射视为迷走神经流的主要调节器,这是勒温的躯体动力分析的能量基础,同时又包含了扎根、人格的能量观点以及修复迷走神经流和脉动的新技术。 Porges 指出,

迷走神经的腹侧分支(W)指向了安全社交起源。迷走神经与大脑的连接大多是自下而上的(80%) 。对身体内部的感知被称为"内感知",涉及整个迷走神经系统。迷走神经只有在压力下才会启动其刹 车功能;在正常功能下,迷走神经会调节能量流和能量资源的增加。愉悦的身体感受需要D V背侧迷 走神经的脉动;而在休息、行动和挑战中,VV、SNS和积极情绪共同参与一个同步过程。在创伤危机 中,当背侧迷走神经系统失去活力、头脑过度活跃时,人格的形成就发生了,这对治疗具有重要意义 。

Introduction

How can we integrate polyvagal theory when doing Bioenergetic therapy?

I believe we must start with looking at their common ground – where do polyvagal theory and Bioenergetic Analysis converge in understanding of human nature and human energy processes. How do they confirm and even enrich each other in the understanding of human response in ordinary life and in crisis?

There are two questions I like to ask and hopefully answer for the sake of clarifying this:

First – What is the focal connection between human energy processes in both Bioenergetic and Polyvagal perspective?

And Secondly – Does both Bioenergetic Analysis and Polyvagal Theory point to energetic connections between trauma-process and character formation?

From there, I will pick some points making sense to me in doing therapy, from both Polyvagal and Bioenergetic perspective.

What is the focal connection between human energy processes in both Bioenergetic and Polyvagal perspective?

In polyvagal literature, for instance in Porges & Dana (2018) it seems to me that therapy is depicted as a kind of drama that, as a metaphor goes like this: *The ventral vagal nerve is the hero in a plot that saves the victim in a happy end by bringing safety through social engagement. The sympathetic system is a soldier that fights boldly but cannot win the peace on its own. The dorsal vagal nerve is the helpless victim that freeze and continues to fall into collapse until the hero enters the stage and restore normal life.*

Is anything missing in the plot? – I like to suggest a first act to the drama: Here, the dorsal vagal nerve lived a harmonious and pleasant life before the disturbing event. A daily life with little worries and low tension, very capable of regulating life through energetic flow and pulsation. It served well both in gaining life energy, everyday pleasure, work and intimate sexuality.

The point is: Polyvagal theory describes the three components of the autonomic nervous system in crisis situations. However, in science it is *untenable to generalize from the extraordinary to the ordinary*. So, we need to check: How does specifically the dorsal vagal system and the autonomic nervous system as a whole, function in normality?

The physicist Galenos who lived in the 2. century identified and named the vagal nerve – "the wanderer" and its system of innervations to the organs. Maintaining health he thought, occurred through mutual balance in organ flow. In 1732, Jacobi Winslow gave the name "sympathetic nervous system" to the chain of ganglia that connected the thoracic and the lumbar spinal cord. Otto Loewi demonstrated in 1921 that the vagal nerve transmitted signals to the organs by acetylcholine and thereby identified the first neurotransmitter to be discovered. In 1932, W. B. Cannon wrote "The wisdom of the body" a book where fight-flight response and homeostasis were introduced. Here he pointed to the important function in both branches of the autonomic system in regulating life processes in daily life and in contrast – their differential response under threats to life. *These are qualitative different modes of operation*. His groundbreaking work stimulated a strong interest in the medical world and psychology concerning autonomic nerves and its function.

Wilhelm Reich was among those who followed this development keenly. It inspired him to do his own experiments with the galvanic skin response at erogenous zones, these zones were already known to have end points of the dorsal vagal nerve in abundance.

In 1945 Reich (1982) published *"the Bioelectrical investigation of Sexuality and Anxiety"*. This book was important in introducing several new theses that is still basic in bioenergetic understanding of energetic flow. Interestingly, he came to this understanding through experimentally connecting electrodes to the erogenous zones of skin and genitals under two conditions: States of pleasure and unpleasure. So, he came to discover the relation of bio-electric energetic flow in the vagal nerve between body periphery and a body-centered core and combined it with flow through body segments, directly related to main vagal ganglions along the vertical body axis. These points, he observed clinically, are pronounced sites of tension in neurotic patients (Reich 1982).

He was able to connect flow to the periphery as corresponding to an experience of sexual pleasure *and* retraction of energy away from the world in unpleasure or anxiety and a corresponding flow into the organismic core. Thus, he understood the movement "towards the world" in contrast with "away from the world and into the Self" as a fundamental biological antithesis (Reich 1982).

He discovered that orgasm has a role in regulating the dorsal vagal nerve itself: Relaxed calm and pleasure is a sign of restored vital function, while tension, anxiety or deadness in feeling tone is a sign of disturbed states (Reich 1996).

The dorsal vagal nerve in Reich's view became the main organ for life energy regulation through charge and discharge. Also, he suggested the solar plexus of the vagal nerve as default energy regulating core. In therapy, he observed that "the orgasm reflex¹" had the strongest effect on restoring and regulating vagal flow.

His work with the dorsal vagal nerve, laid down the energetic foundation for Alexander Lowens *Bioenergetic Analysis*. As we know, All Lowen added *ground-ing, dynamic descriptions of the character types and new innovative techniques,* applied in therapy and body exercises. They too, aim at discharging tensions, deepen breathing and softening the body, and so *is a second road* to restore vagal flow and pulsation (Lowen 1994). Porges & Dana et.al (2018) re-formulation of the vagal system, through introducing the ventral vagal branch as a social engagement system that orients us towards the social source of safety, is *a third road* by providing a state of safety in the vagal nerve. Also, he introduced "neuroception": We seems enabled to feel the state of aliveness through the vagal system. For instance, I believe we all can easily detect qualities as:

Safety/unsafety; tension/relaxation; pleasure/anxiety; aliveness/deadness; strength/weakness, health/sickness (Hafstad 2008; Damasio 2018). This *sensing* may well be based on afferent vagal pathways to the brain, since it is now settled that 80 percent of the brain/vagal connections are sensory and only 20 percent are motor pathways. Such sensing of body interior is usually called interoception, a main example of bottom-up dominant processes (Hafstad 2008).

Polyvagal theory is *the new wine of these days*, opening a new avenue in our work by pointing to social safety and warm reciprocal contact as a changemaker in calming the vagal nerve. *Is Porges approach preferable or additional?*

Since neither Reich nor Lowen could know about the ventral vagal function, their mode of working with emotional disturbance had to take different roads: Reich, in removing blocks and releasing pulsating flow that involved the pelvic

By orgasm reflex, he referred to the clinical observation in clients to give in to organismic flow and surrender to their spontaneous movements through the body segments. It does not necessarily imply genital orgasm in vivo.

and whole-body discharge – *the new wine in the 1950's* and Lowen, by building up charge and challenge to a tipping point that more or less forced the client to surrender from a state of intolerable tension and thereby open up to rather dramatic changes. In the 1970s in Norway at least, this was *the new wine* in psychotherapy. *Porges theory is clearly a supplement, enriching our view on regulating functions, and is suited to make a stronger position for the organismic view on human nature.*

We started off with a question: What is the focal connection between human energy processes in both Bioenergetic and Polyvagal perspective?

In BA human energy processes has a starting point in Reichs study of the dorsal vagal nerve and its active energetic function, he was also aware of the ventral parts anatomy (Reich 1982) which he tentatively related to the throat and neck energetic segments. Porges & Dana et al. (2018) communicates about the ventral vagal with groundbreaking understanding. Concerning the dorsal vagal he seems not to differentiate between normal and disturbed function and does not focus on the energy-active side of its function. This seems a divergence that leads to different conclusions. What is of value, is certainly the focus on the ventral vagal nerve, contribution of the social engagement system, to our understanding of social, emotional, therapeutic and organismic processes. To my present knowledge, Porges does not link trauma and character formation. A possibly simplifying view on developmental matters.

The connection that strikes me most, is that Polyvagal theory, stimulates an additional dimension to the understanding of human energy regulating processes. To me, it is like a missing piece in a jigsaw puzzle has been found and the big picture is seen more clearly. Let me try to hint at what view is taking form: *The whole autonomic nervous system functions as a main regulator of organismic bioenergy. To hold this function, it must have properties of finetuned synchronization and to make mutual connections with an even broader organismic system:*

At the base of this broader system, we find the production of ATP in cell mitochondria. In contemporary cell physiology this is now called *cellular bioenergetics* (Alberts et al. 2015). How it is regulated at the organismic and behavioral levels, has remained unclear or quite mechanically described in physiology. But putting Reichs formulations together with Porges' adds to up to a grand picture:

The unmyelinated dorsal vagal nerve could have had this regulating function in organisms hundreds of millions of years ago, and this arrangement seems favored by evolution to this day: Antonio Damasio (2018) refers to development of nervous systems in early multicellular organisms in the Precambrian period 600–540 million years ago: "The nervous system alters the operation of tissue that receives it ... the fibers travelling in the opposite direction ... perform an operation known as interoception. The purpose of such an operation? Surveillance over the state of life" (Damasio 2018).

Later, the myelinated sympathetic system (ANS) developed in vertebrates to quickly boost and fine-regulate energy mobilization, and even later with the emergence of mammals, the myelinated ventral vagal nerves added fast fine tuning and energy supply by engaging social safety, both in daily living and in emergency. Above the ANS, the brain developed emotions, the "social brain" (Siegel 2007) and conscious awareness of body aliveness (Hafstad 2008).

I have mentioned that Reichs bioenergetic formulations, adopted by Lowen – was strongly related to ionic dynamics in the vagal nerve. Porges points to forceful retraction in the dorsal vagal nerve in crisis, i. e. its brake function, as Reich had done before him, but fails in estimating its capacity for expanding by energetic streaming "towards the world" in normal daily function.

The human autonomic nervous system as a whole is placed, with rich connections to body and brain to serve vitality functions². The dorsal vagal nerve is at the organismic center – regulating the interplay between cells, tissue, organs and their energy production.

Reich shows the importance the dorsal vagal nerve in ordinary life and normal challenges: The dorsal vagal nerve is a core resource in aliveness. I suggest, we might even call it the Life Nerve, since it feels like coming alive when it is freed and it hurts like nothing else when it is deeply threatened.

In conclusion, Porges shows how the dorsal vagal functions as a brake or moving towards standstill under treats, and shows how the social-engagement system can reverse this response, but seems to omit its ability to reach out and *expand* in a contact function with the surroundings.

The vagal nerve as a whole, has an anabolic – energy building function, while the sympathetic system mobilizes energy and uses energetic resources. Its longterm effect is catabolic (Frayn & Evans 2019). Overall, they need to balance each other, but *only* when grounded in vagal expanding vitality.

We can value the ventral vagal function and hold on to the dorsal vagal nerve as the keeper of naturally balanced energy flow and pulsation. As I see it – the dorsal vagal nerve, has a need to activate its brake function only when stressed or hurt. In daily life and even from birth, its main functions are fine tuning of energetic flow and building energetic resources.

² By vitality functions I include energizing, regulating and adapting to environment.

Best case then – or one of our main goals, is to therapeutically facilitate dorsal vagal movements in its alive, smooth streaming standard mode – to promote a pleasant and warm body feeling – movement in ebb and flood between peaceful rest and pleasurable excitement. With that in place, the sympathetic nerves can also shift within the same window between rest and peaks of excitement, joy in play, freedom in action, challenge can be joyful.

When ventral vagal nerves join in this dance, social growth and self-development can fall into synchrony.

This is where the bioenergetic concept of energetic aliveness and polyvagal theory fits together and is a strong hint to what promotes both personal vitality and sociality: *Life streaming and pulsating from center to periphery and along the vertical body axis is enabled by the dorsal vagal system; co-regulated and supported by the ventral vagal part – giving excited intensity and peaks by the sympathetic system with its unique capacity to mobilize energy, especially in a positive emotional mode and in reaching out to fellow beings.*

Does both Bioenergetic Analysis and Polyvagal Theory point to energetic connections between trauma-process and character formation?

Trauma is like a storm of events that leaves little room for orderly response. It implies a turmoil in energetic mobilization and energetic dysregulation: Energy is first violently mobilized by a sympathetic alarm, but in a true traumatic incident it cannot be spent in an orderly sequence and direction. Metabolic Science has found that energy production in muscle cells can increase up to a thousand-fold in a second (Frayn & Evans, 2019). Therefore, if energy spending is at maximum, most of it is used up in ten seconds: *Our choice in this situation is harsh – be successful in fight or flight or get lost in chaos. Then the rest of the process is forced into lowered energy levels both because of falling energy supply and because of the instinctual response to threat is to start a conserving shut down: Combining conservation of the energy left and reduction of threat impact to the vital core.*

This time, the dorsal vagal response move energy "away from the world"; from the bodily periphery – from sensory and motor activity and conserve what is left at the organismic core. I think of the dorsal vagal system as a basically vulnerable organ. Interoceptively it can give us just that feeling when under serious treat: *Naked vulnerability* A situation that develops slower but recurrent – as often is the case in family settings, has by repeating – about the same amount of threat to personal integrity and the safe place of the habitat. The long-term outcome is often about the same: High spending of energy first, with sensory alertness and muscular readiness to respond. But with no route for escape, normal energy resources run out. We can call this *"crisis breakdown of energy economy"*.

Sometimes repetitive incidents can take another route in the crisis: English people have an expression in crisis and hardship – "Keep calm and carry-on". One factor that is probably of relevance is the level of anxiety and dorsal vagal contraction. Another is the absence of beneficial eye witnesses or peer victims. Can I relay on anyone? Can I risk observing and wait? Can I feel enough strength in myself? Can I sooth myself? It is a possibility then that maximum crisis -energy spending starts *some* shift towards an endurance profile to recover a degree of energy rise. We may call this *"hardship-endurance energy economy*". In any case, the incident gets into an interaction with what is already established in the development as earlier trauma; developmental deficiency and character formation: They become nested in the overall developmental process. A new trauma can therefore both influence and be influenced by all these trains of ongoing development disturbances.

Both scenarios *start* a process of short-term protective attempts, *but is not the end of it*: In the aftermath when the acute threat fades away, the victim is in a phase of recovering partial energetic equilibrium – full energy and integrity however – is hard to restore. At the same time the person is creatively searching subconsciously and highly alert for permanent protective cover: In such a state, a split between depleted body energy and feverish mental activation can be created – often at high speed, new patterns – a modified design for future protection – can be forged. This is often a form of "one trial learning" that might constitute a lesson for life: An organismic procedural-rule followed habitually.

I believe this furthers character formation.

Especially in childhood, trauma is a situation where the child *neither* has options, understanding nor skills to grasp what is going on *nor* options to flee or fight the perpetrator.

The energetic resources fall far short of what is needed for security. Yet, a child is driven to find its way within its limited resources, and so it does. The posttraumatic behaviors may be very maladaptive, but this is important: *It was always the best solution the child was able to find: I believe character formation happens while the dorsal vagal system is de-vitalized and contracted and still the mind forges a protective plan, creating an illusionary hope as best it can. Later still, both the plan and the de-vitalized state come into play again whenever the person meets new threat* ening situations. To others, this looks sometimes as re-traumatization, sometimes as acting out. For the person it is hard to see the difference because he or she is just doing what survival orders.

Residuals of the body/mind functional split that appears in the trauma crisis is an integral part of the character formation.

The clinical fact is very real: Conscious Mind flees from bodily awareness of the *naked core hurt* and takes refuge in mental processes or in the extreme, leaves the body as if it is in a remote and higher place outside the body, even travel long distance to places it has never been before – as if life is somewhere else than in the living body. Many of my clients has reported such experiences.

How does this functional split come about? What is its origin?

The feverish hype of the mind cannot be directly caused by the effector vagal pathways, since they descend from the midbrain to the body interior and do not ascend up in the brain. So, the *lucid* mind activation must be caused in other ways.

What can *partly* explain the lucid brain effect is that *sympathetic activation* brings adrenaline into circulation and activates noradrenaline pathways in the brain.

But there is another and deeper explanation available: Polyvagal theory and the literature on the vagal nerve in general, mainly focuses on the motor neurons of the vagal system, although eighty percent of the vagal fibers goes the other way – from the viscera to the brain. This bias is quite odd and begs for an explanation: Eighty percent of the vagal system sends sensory information online from body interior to the brain – here the prime end-station is a site in the cortical brain: The Right Hemisphere Insula. (Hafstad 2008)

What the Insula does, is to feel the state of life in our bodies (Damasio 2018).

What is the strongest direction of influence then – the brains influence on the vagal nerve or the vagal influence on the brain? The Insula created impression of the body is called *interoception* and was known by Sigmund Freud, but mainly ignored by him and later all of neuro-science, until *Antonio Damasio* convincingly demonstrated the following: *This sensing of body aliveness state appears to be essential to normal consciousness – if it is totally lost, as in traumatic vagal collapse – consciousness is also gone.*

In trauma response, when the body can feel numb or almost gone – the Insular cortical activity is then more or less shut down and becomes silenced.

Instead, *older brain stem nuclei* compensate by offering some fogy body impressions to keep the person awake and partially conscious. The result?

Trauma induced mental fever comes with an extremely unbalanced cortical activation that creates this odd experience: *I exist even when I have left my body*

The person is left with a very strange kind of relief.

This can explain why in a posttraumatic state, a residual feeling of unreality and chronic mental overactivation are main symptoms along with collapsed, frozen and unstable body energy.

This offers us a main therapeutic challenge: *How can the mind recover to an ordinary state were body and mind unites in an energetically mutual balance?*

Restoring "the dance of aliveness" probably needs to start with supporting a gradual return to bodily feeling. This can only happen within a combined feeling of safety and vitalization in the therapeutic process.

So, summing up a preliminary position from the two problems I departed from – the energetic dynamics between trauma and character formation, is a process from:

- An original relatively alive state of feeling some safety, with a corresponding vagal flow and attuned exchange between body and mind in a relatively mutual balance
- Through a shocking experience creating lowered bodily energy and unbalanced mental overactivation, or a series of them,
- To a new orientation where the person holds on to a permanently protective life attitude that keeps the vitality flow and the mental operation in a certain repetitive grip, unable to surrender to full aliveness and balanced mentality.
- The original aliveness has become a bias towards compulsory repetition of habits and watchfulness to treats that may actively resists feeling of trust and safety.

From a Bioenergetic perspective, combined deficiencies and character patterns adds up to keep re-traumatization risks high. The brain is alert to new treats and by that falls victims of repetition compulsion that implies feeling *at risk or even provokes new risks*.

Cultivating warm softening energetic streaming *through ventral vagal restoration and flexible sympathetic shifts*, gradually helps raising the energy level and freeing dorsal vagal pulsation. Together with bioenergetic body work, it can bring about revitalization and provide the necessary energy to change. Both approaches need to be held in a predictable and warm therapeutic relation.

Before I end this argument about the relation between trauma and character formation, there is one rather tricky outcome of character formation that we need to be aware of: The Self creates a kind of global map that we may tentatively call: *My place or fate in the world*

It can become a hidden meta pattern that keeps the character as *change resistant*. Some amount of cognitive work may be necessary to bring the therapy to a good finish. To access this influential part of the self. We can simply ask, *"how do you see your place and fate in the world?"*.

This section started with a question: *Does both Bioenergetic Analysis and Polyvagal Theory point to energetic connections between trauma-process and character formation?*

I have not yet seen that Polyvagal therapy has a developed focus on energetic dynamics and on the conserving dynamics of trauma-character dynamics. The question remains if resistance to change therefore may be underestimated in the polyvagal modality.

What can be useful in the therapy process, based on what we have seen so far?

I like to suggest some elements, ordered into four steps.

First, I try to see the unique person and adjust to her safety seeking style.

It is quite obvious that we need to have a method and some flexible plan for adapting to the client, but just as important – is to meet the client with warm natural interest and look for both unique qualities and main hurts. Also, how do they seek safety and how does it show. The struggles they had and how they managed, is handled best when we can admire them and show it.

Being touched and let it show brings contact and safety to the relation, since they always wonder if my professionality implies distance, restriction of aliveness or even disinterest. Sensing that the therapist is as human as myself, is a big relief and sets the depth and horizon of what we can accomplish together.

Contact and safety are at the core of the process, when a safe quality of intimate contact can appear – togetherness in the heartfelt and vulnerable – then the movement becomes deeper and stronger – deep character work needs to be grounded in this kind of safety. So, the work is best done in a stable atmosphere of friendly flexible helpfulness.

Secondly, I search for how the combined trauma history and character formation makes sense and to look for a possible core hurt.

I find interest in the client's trauma history and try to notice both the bodilynonverbal communications and the feeling in my own body that appears through the sessions.

If I can take in more, it's good if I can notice both *what is said and what is avoided*, since in the *form* of expression there are hints to what is not yet ready to be told.

We can sense how it feels to be a person in a hard-won struggle to control. Often, we find an overall quality of holding back or the opposite – like everything is thrown out disorderly when no option of regulation was possible.

Both has to be affirmed as a necessary style of handling what is overwhelming: "This seems to me the way you have needed to handle danger; you show me how overwhelming life has been".

Pieces of traumatic incidences and repetitive patterns are collected gradually, leaving an open space for more to come.

Characterological protections have a general gestalt form but also a network of finer aspects, where we can see traces of when and in which situations they may have been formed. Seeing this clearly may not be possible before late in the therapy.

I mentioned earlier that all people create a kind of global map that we may tentatively call: *My place or fate in the world*

Quite early or when it is possible we can ask, – (I remind you again): *"How do you see your place and fate in the world?"*

Later, it can then be used as a reference point whenever it fits.

What is of outmost importance here, is that *My place in the World* usually is connected to a core hurt or a primal scene that sets the stage for aftermath traumas and influence their course. Thirdly, I find it essential to stimulate expressed vitality, work with trauma themes through graded exposure and validating the protective response.

If within reach – *"supporting naked vulnerability"* by revisiting the traumatic scene – the therapist as a close companion, can help retuning the dorsal vagal nerve to its normal flow and pulsation.

Sometimes quite directly, sometimes gradually, we introduce small pieces of body related work and focusing body feeling. We introduce it as a possibly useful way and await the client response.

If they refuse or show reluctance or flaccid compliance without genuine interest, we should be respectful and affirmative about the response: "*Here is a sign* of feeling at risk, maybe it is not safe enough yet?"

It is useful though to be curious of *what the reluctances is about*. Later we may discover what are *their* experiential roots *and* their part in the traumatic history and characteristic protection.

Also, while expressive body work goes on, trauma and character response will appear in the *form of expression* and the *way of relating*.

We should be ready for reactions like *pushing on without feeling* or *stiffening* as a sign that the interventions are introduced too early or was too much. Then

we need to let go of the attempted intervention, and adjust to the client need for support and safety. Maybe we can say:

"Ok, I see this was not safe for you, I really need to respect that"

An experience of a special kind may appear: We as therapists, can feel in our body or may have a vision – like we hit upon something crucial at the same time as the client. Often this is about the core hurt.

Sensitivity to these moments may gradually develop through our life as therapists. It is like a feeling coming alive instantly – a kind of awakening of just knowing that cuts through all thinking and distance *or* like being present with the client in the original moment. We can get a vivid vision of the situation as it appeared and we can feel as a witness. At least this is my experience.

Often as a response, the client relaxes and *improves* in contact within this session. It is like we are attuned interoceptively – feeling the bodily state of the other. This can go both ways, both in the positive and negative aspect.

In such moments unreality and doubt can fall to the ground in both of us.

(Or it can be a retractive response when sensing a negative body attitude in the other)

This feeling when we touch upon something essential in the life of a client so that we are together in it – has an emotional charge in it – like unexpectedly coming upon something treasurable. This, I would say – is a response from our joint "inner field of aliveness": When coupled interoception happens between me and the other I shortly call it: *Life feeling Life*

I trust we all have it in us, also a newborn baby may have it, probably since the vagal system has already matured in the last two months before birth. I have felt it several times meeting a newborns gaze. What Porges calls neuroception is possibly the same basic sense of alive tissue to feel and respond to alive tissue. The energy that is awakened by this contact is sharply different from the feeling of what is dead, forced or disturbed.

Such moments seem crucial in change.

This sense is like an illuminating torch that can lead us wandering along with the client to suspend character, little by little. When a spark of life is lit in the therapist as a response to the client – the life in the client still looking for life may immediately recognize this, I guess – through vagal interoception.

the compensatory habitual responses that cover up lively responses, the mechanical substitutions can fall to the ground when life awakens and "just knowing" appears in this mutual field. A client finally daring to look into my eyes after several years of therapy, started to cry and said: *Now I see I am really human*,

Her illusion of being intolerable, seemed to fall to the ground, like the spell we hear of in fairytales has lost its power.

A short glimpse of truth counts. It is preciously felt and can make a shift at the core of being – a freeing of dorsal vagal function.

Fourthly, Integration of a vital state is most opening when both client and therapist can tolerate naked vulnerability. This, along with social safety and contact is felt as intimacy.

Smooth vagal flow and attuned exchange between body, mind and others can develop from the vital core and probably needs experiences of being safe in mutual vulnerability to grow and become a stable enough state to become a part of "who I am".

Another result is *a giving in to life* by melting trauma reaction patterns and character protections into a new sense of reality. The client Self can feel both unique and ordinary. There can be a sense of ability and a right to take part in life at par with others. New feeling of a granted common ground is a basic source for safety. This amounts to a shift in "My place in the world" construct.

Now, I like to share a little from my personal therapy. My main therapist whom I owe a great shift in my life, worked with a bioenergetic character-oriented approach. Two moments of my own therapy can serve to contrast each other: He said once: *"I see you as a Texan gunslinger"*. I asked him: What do you mean by that? As I remember it, his answer was: "Now, you are the one to figure that out".

Honestly, it felt as if he left me standing there, I needed him to show me the way. I felt left alone and went up in my head to figure out what he meant. Nothing much happened on that road.

My learning point is: I needed warm alive aid – what he said of my character needed to reach into feeling my basic hurt, I needed to feel "held safely in the original pain". Instead, his statement only threw me back into the self-sufficient lonely outlaw character I needed to let go (My place in the world)

I got fearful his formulation was a critique or worse – an accusation.

As I have attempted to demonstrate, only an alive connection in this can do it – bring life back into the core of being: Life feeling life is the ignition that awakens life and trust.

An interpretation of a general character pattern is only useful I believe, if it occurs in a moment of warm and alive mutual contact.

I like to tell you another incident where my therapist was most successful: He had identified my traumatic hurt already in my second session with him, back in 1992:

He said: "It is rarely as clear as with you, you were a hated child"

I felt seen for the first time and remember the impact: A strong movement of bodily softening as my chronic vagal frost started to melt. Especially my feet started to boil as an unfamiliar wave of energy ran into my feet – connecting me to the ground. I had had no way of grounding and was kept in a state of unreality until this moment.

How does a hated child adapt? The Texan gunslinger outlaw image was *on the spot*, since it was my absolutely necessary character adaptations but also one reason for me to be self-suspicious and I was afraid I was his suspect too. So, I stiffened. But now, I keep this in my heart: *Feeling the clients basic hurt in me strikes the life cord in the client and starts the process of melting the character.*

When hurt and dysregulation is residuals from preverbal stages of development, as with me – the work needs to be done over and over again through attuned preverbal exchange patterns where the impulses of the client is the point of departure. Learning to know the state of safety is provided by the client experiencing being received and responded to again and again so that a good soft feeling can be an inner homestead.

This I learned from Daniel Stern (1995): Schemas of knowing the Self in the world builds gradually up through live acceptance of the infant needs by the caregiver. This acceptance is also welcomed when the person at hand is a therapist.

Finaly we come to my last words: When we warmly meet vocal and facial signals from the client, *their way of being themselves* – is taken in through bodily resonance –it is felt interoceptively and therefore real.

Such moments resemble a caring mother with her newborn. The naked vagal nerve, is for me metaphorically the baby – a baby who has lost its screaming voice, how do we then know its despair if not through feeling it in our joint life nerves?

So, the best cure is feeling naked vulnerability and safety in togetherness. I feel this as real as real can be.

References

- Alberts, B., Johnson, A., Lewis, J., Morgan, D., Raff, M., Roberts, K. & Walter, P. (2015). Molecular Biology of the Cell (6th ed.). New York: Garland Science.
- Damasio, A. (2018). *The Strange Order of Things; Life, Feeling and the making of Cultures*. New York: Pantheon books.
- Dana, D. (2018). *The Polyvagal Theory in Therapy; Engaging the Rhythm of Regulation*. New York, London: Norton.
- Frayn, K. N. & Evans, R. (2019). *Human Metabolism A Regulatory Perspective*. Oxford U.K.: Wiley-Blackwell.

- Hafstad, A. (2008). The Graceful Awareness of The Human Being. *The European Journal of Bioenergetic Analysis, 4*(I).
- Lowen, A. (1994). Bioenergetics. London, New York: Pinguin Books.
- Porges, S.W. & Dana, D. (2018). *The Clinical Application of The Polyvagal Theory*. London, New York: Norton.
- Reich, W. (1982). *The Bioelectrical Investigation of Sexuality and Anxiety*. New York: Farrar, Straus & Giroux. First published 1945 (German).
- Reich, W. (1996). The Function of the Orgasm. Norwegian translation. Oslo: Pax Forlag.

Siegel, D. (2007). The Mindful Brain. London, New York: Norton.

Stern, D. (1995). The motherhood constellation. London: Karnac Books.

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Arild Hafstad was born in Oslo, Norway in 1957. He graduated in Psychology in Oslo I 1983 and became Clinical Psychologist in 1989, after work in psychiatric wards, polyclinics and prevention of small children. After a few years as Chief Psychologist, he started a private practice and still do. Met Phil Helfaer in 1992 and became involved in BA. Earned his CBT in 2004, did BA supervision and was training assistant with Heiner Steckel. Certified IMAGO Couple Therapist 2008. Was president in NFBA until it closed in 2010 and was cofounder of NIBI in 2017. Is president and local trainer in NIBI. Applicant for IIBA Faculty since 2018.

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