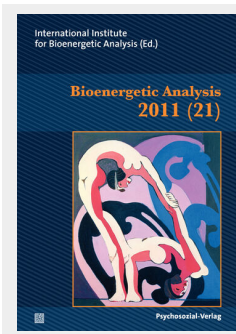


*Jörg Clauer*

# Neurobiology and Psychological Development of Grounding and Embodiment



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# NEUROBIOLOGY AND PSYCHOLOGICAL DEVELOPMENT OF GROUNDING AND EMBODIMENT

## APPLICATIONS IN THE TREATMENT OF CLIENTS WITH EARLY DISORDERS<sup>1</sup>

*Jörg Clauer*

### ABSTRACTS

#### ENGLISH

Alexander Lowen's concept of "grounding" is unique to Bioenergetic Analysis (BA). The bioenergetic grounding concept can scientifically be based on cerebral representations and integration of sensations – especially on proprioception allied with sense of equilibrium and touch. In addition, it is an operationalization of Freud's principle of reality, i.e., it is oriented to reality in the here and now. Bioenergetic techniques, stimulating the integration of "body-maps" like vestibular perception, proprioception and touch, may improve consciousness, vitality and cohesion of the self in various groups of clients with early disorders. Neurobiology, modern philosophy and system theory not only proclaim the end of the Cartesian duality of body and mind, but also demonstrate, how the perception and consciousness of our self is based on such body-maps.

In this paper the concept of grounding is mainly being conceived of

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<sup>1</sup> This paper is an updated version of an article first published in a German journal of psychoanalytic orientation (Clauer 2009). Part of this work was presented in Paris (November 2008 at the first international congress of body psychotherapy of ISC and EABP).

as relational and rooted in the psychosomatic self. Furthermore, a developmental perspective of grounding is elaborated, based on scientific findings on the primary triad of baby, mother and father. These results may gain importance as organizing principles in body-psychotherapy. Three case vignettes illustrate principles of grounding, cooperation and deconstruction from the perspective of client and therapist.

*Key words:* cooperation, deconstruction, embodied self, grounding, participation, triad

### **NEUROBIOLOGIE UND DIE PSYCHISCHE ENTWICKLUNG VON GROUNDING UND EMBODIMENT (GERMAN)**

Das Konzept des Grounding von Alexander Lowen ist einzigartig und steht für das Spezifische der Bioenergetischen Analyse (BA). Das Grounding-Konzept lässt sich wissenschaftlich mit den Repräsentationen und der Integration sensorischer Wahrnehmungen im Gehirn in Verbindung bringen – besonders mit der Tiefensensibilität (Proprioception) zusammen mit dem Gleichgewichtssinn und dem Berührungsempfinden. Zudem ist es eine Konkretisierung des Freudschen Realitätsprinzips, d.h. Grounding ist mit der Wahrnehmung der Realität im “Hier und Jetzt” verknüpft. Neurobiologie, moderne Philosophie und Systemtheorie proklamieren nicht nur den Abschied von der cartesianischen Leib-Seele-Spaltung; sie zeigen auch, wie unsere Selbst-Wahrnehmung und unser Bewusstsein in den Körperwahrnehmungen und den entsprechenden “Körperlandkarten” des Gehirns verwurzelt sind. Bioenergetische Methoden zur Verbesserung der Wahrnehmungen aus Gleichgewichtsorgan, Propriozeption und Berührung und der Integration der entsprechenden “Körperlandkarten” im Gehirn können die Bewusstheit, die Vitalität und Kohäsion des Selbst bei verschiedenen Gruppen von “Früh-Gestörten” Klienten fördern.

Dieser Beitrag betrachtet das Grounding-Konzept vornehmlich aus einer relational-interaktionellen Perspektive und als Ergebnis unseres verkörperten psychosomatischen Selbsterlebens. Außerdem wird eine entwicklungspsychologische Perspektive des Grounding vorgestellt,

die auf Forschungen über die primäre Triade von Säugling, Mutter und Vater basiert. Die Ergebnisse könnten als organisierende Prinzipien in der Körperpsychotherapie unserer Patienten Bedeutung erlangen. Die Prinzipien und therapeutischen Möglichkeiten von Grounding, Kooperation und der Dekonstruktion der Perspektiven des Klienten und Therapeuten werden durch drei Fallbeispiele erläutert.

*Schlüsselwörter:* Beteiligung, Dekonstruktion, Grounding, Kooperation, verkörpertes Selbsterleben, Triade

**NOTES SUR LA NEUROBIOLOGIE ET LE DEVELOPPEMENT  
PSYCHOLOGIQUE DE L'ENRACINEMENT ET L'INCARNATION.  
APPLICATIONS DANS LE TRAITEMENT DES CLIENTS AYANT DES  
TROUBLES PRÉCOCES (FRENCH)**

Le concept d' "enracinement" de Alexander Lowen est unique à l'Analyse Bioénergétique (BA). Le concept d'enracinement bioénergétique peut être basé scientifiquement sur les représentations cérébrales et l'intégration de sensations – spécialement sur la proprioception alliée à un sens de l'équilibre et du toucher et donc de l'enracinement neurobiologique de notre propre conscience au-dedans de notre self somatique et de nos relations interpersonnelles. De plus, c'est le principe de réalité de Freud rendu opérationnel c.à.d. qu'il est orienté vers la réalité dans l'ici et maintenant. Les techniques bioénergétiques, en stimulant l'intégration de "cartes du corps" comme la perception vestibulaire, la proprioception et le toucher, peuvent améliorer la conscience, la vitalité et la cohésion du self dans des groupes de clients variés ayant des troubles "précoces". La Neurobiologie, la philosophie moderne et la théorie systémique proclament non seulement la fin de la dualité du corps et de l'esprit Cartésienne, mais démontrent aussi, comment la perception et la conscience de notre self sont basées sur de telles cartes du corps.

Dans cet article le concept d'enracinement est principalement conçu comme relationnel et enraciné dans le self psychosomatique. De plus, une perspective de l'enracinement selon le développement est élaborée, basée sur les découvertes scientifiques de la triade primaire bébé, mère

et père. Ces résultats peuvent gagner en importance en tant que principes organisateurs en psychothérapie corporelle. Trois vignettes de cas illustrent les principes d'enracinement, coopération et déconstruction à partir de la perspective du client de du thérapeute.

*Mots Clé:* coopération, déconstruction, self incarné, enracinement, participation, triade

### **APUNTES SOBRE NEUROBIOLOGÍA Y DESARROLLO PSICOLÓGICO DEL GROUNDING Y LA CORPOREIDAD. APLICACIONES EN EL TRATAMIENTO DE CLIENTES CON TRASTORNOS PREMATUROS (SPANISH)**

El concepto de “grounding”, de Alexander Lowen es específico del Análisis Bioenergético (AB). El concepto bioenergético de enraizamiento puede basarse científicamente en las representaciones cerebrales y en la integración de sensaciones – especialmente en la propiocepción junto con un sentido del equilibrio y del contacto y entonces el enraizamiento neurobiológico de nuestra auto-percepción desde nuestro self somático y desde las relaciones interpersonales. Además, es un funcionamiento del principio de realidad de Freud, por ejemplo, está orientado a la realidad en el aquí y ahora.

Las técnicas bioenergéticas, estimulando la integración de “mapas corporales” como la percepción vestibular, la propiocepción y el contacto, pueden mejorar la conciencia, vitalidad y cohesión del self en varios grupos de clientes con “desórdenes tempranos”. La neurobiología, la filosofía moderna y la teoría sistémica no solo proclaman el fin de la dualidad Cartesiana de cuerpo y mente, sino que también demuestran cómo la percepción y conciencia del self se basa en tales “mapas corporales”.

En este artículo el concepto de grounding es fundamentalmente concebido como relacional y enraizado en el self psicósomático. Además, una perspectiva evolutiva del grounding es elaborada, basada en los conocimientos científicos acerca de la tríada bebé, madre y padre. Estos resultados pueden ganar importancia como principios organizadores en la psicoterapia corporal. Las viñetas de tres casos ilustran los principios

de grounding, cooperación y deconstrucción desde la perspectiva de cliente y terapeuta.

*Palabras clave:* Cooperación, deconstrucción, self corpóreo, enraizamiento, participación, tríada.

**NOTE SULLA NEUROBIOLOGIA E SULLO SVILUPPO PSICOLOGICO DEL GROUNDING E DELL'EMBODIMENT. APPLICAZIONE NEL TRATTAMENTO DI PAZIENTI CON DISTURBI PRECOCI (ITALIAN)**

Il concetto di grounding di A. Lowen è originale dell'analisi bioenergetica. Da un punto di vista scientifico si basa sulle rappresentazioni cerebrali e sull'integrazione delle sensazioni – specialmente sulla propriocezione, connessa al senso di equilibrio e al contatto, e quindi come radicamento neurobiologico dell'auto-consapevolezza nel Sé somatico e nella relazionalità. Inoltre, è un modo di rendere operativo il concetto di “principio di realtà” di Freud, per esempio è orientato alla realtà dell' hic et nunc. Le tecniche bioenergetiche, che stimolano l'integrazione delle “mappe corporee” quali la percezione vestibolare, la propriocezione e il contatto, possono arricchire la consapevolezza, la vitalità e la coesione del Sé in vari gruppi di pazienti che soffrono di disturbi precoci. La neurobiologia, la filosofia moderna e la teoria dei sistemi non solo proclamano la fine del dualismo cartesiano di corpo e mente, ma dimostrano anche che la percezione e la consapevolezza del nostro Sé si basa su tali mappe corporee.

In questo saggio il concetto di grounding è concepito come relazionale e radicato nel Sé psicosomatico. Inoltre, viene elaborata una prospettiva evolutiva del grounding, basata su scoperte scientifiche che riguardano la triade primaria di bambino, madre e padre. Questi risultati possono risultare importanti come principi organizzatori della psicoterapia corporea. Tre vignette cliniche illustrano i concetti di grounding, cooperazione e decostruzione dal punto di vista del paziente e del terapeuta.

*Parole chiave:* Cooperazione, decostruzione, Sé incarnato, grounding, partecipazione, triade

**NOTAS SOBRE NEUROBIOLOGIA E DESENVOLVIMENTO PSICOLÓGICO DO ENRAIZAMENTO(GROUNDING) E DA CORPORIFICAÇÃO. APLICAÇÕES NO TRATAMENTO DE CLIENTES COM TRANSTORNOS PRECOSES (PORTUGUESE)**

O conceito de “grounding” vindo de Alexander Lowen é exclusivo da Análise Bioenergética (AB). Este conceito – grounding bioenergético – pode ser cientificamente baseado nas representações cerebrais e integração de sensações – especialmente em propriocepção aliada com o senso de equilíbrio e de toque e, portanto, o enraizamento neurobiológico da nossa auto-consciência dentro de nosso self somático e dentro de relacionamentos interpessoais. Além disso, é uma operacionalização do princípio Freudiano de realidade, ou seja, é orientado à realidade no aqui e agora. As técnicas Bioenergéticas, estimuladoras da integração dos “mapas corporais” como percepção vestibular, propriocepção e o toque, podem aprimorar a consciência, a vitalidade e a coesão do self em vários grupos de clientes com transtornos precoces. A Neurobiologia, a filosofia moderna e a teoria de sistemas não apenas proclamam o fim da dualidade cartesiana entre o corpo e a mente, mas também demonstram como a percepção e a consciência de nosso self é baseado em tais mapas do corpo.

Neste artigo o conceito de *grounding* está principalmente sendo concebido como sendo relacional e enraizado no self psicossomático. Além disso, uma perspectiva de desenvolvimento de grounding é elaborado com base em conclusões científicas sobre a tríade primária: bebê, mãe e pai. Estes resultados podem ganhar importância como organizadores dos princípios da psicoterapia corporal. Três casos irão ilustrar os princípios do *grounding*, cooperação e desconstrução a partir da perspectiva do cliente e do terapeuta.

*Palavras chave:* cooperação, desconstrução, self corporificado, grounding, participação, tríade



## INTRODUCTION

One of the most significant contributions of the recently deceased founder of Bioenergetic Analysis, Alexander Lowen, is his concept of grounding. Bioenergetic therapists understand it as rootedness in the reality of one's own body, of one's own history, in relationships and in the reality of a person as lived here and now. "Grounding stands for the uniqueness of Bioenergetic Analysis that can not be confused with other theoretical and practical orientations of psychotherapy. The concept of grounding does not exist in psychoanalytic literature and emerged when Alexander Lowen ... began to work with breathing and the body in the standing position ... The psychoanalyst was brought out of his passive-abstinent role ... Grounding was intended to reconnect the patient with the ground of reality." (Oelmann 1996, p. 129 (translation by author, which hereafter will be referred to as tba.)). Lowen has developed grounding as a new corner pillar of his energetic perspective. The charging in the upper half of our body and the longitudinal or pendular swing of our energetic charge needs discharge through the lower half of the body downward into the earth or as sexual discharge (Lowen 1958, p. 78ff.+92, Helfaer 1998, p. 65ff.). "We move by discharge of energy into the ground ... All energy finds its way eventually into the earth; this is the principle known as "grounding." It explains the discharge through storm and lightening of the overcharged atmosphere. This principle must also underlie the sexual act" (Lowen 1958, p. 80).

In bioenergetic therapy grounding can be seen as an important acquisition to prevent experiences of dissolution of boundaries, dissociation and loss of reality. It is also a concretization of Freud's reality principle: "Being grounded means being in touch with reality" (Lowen 1978, p. 48). "The difference (to Freud, author's note) is, that it is not restricted to cognitive understanding" (Pechtl 1980, p. 193, translation by author (tba.)). Also grounding circumscribes the holding a person receives through the voice, eye contact, touch, and physical contact in relation with another person. In this paper the concept of grounding is mainly being conceived of as relational and rooted in the embodied self.

The concept of grounding is mostly associated with six realms:

- a) Upright gait in the gravity field of the earth – i.e. the contact with

- the ground, secure stance and autonomy, which we do not have in the early days of our life as a baby;
- b) Feeling contact with all realms of ones own physicality – i.e. the rootedness in the perception and awareness of the bodily-self (i.e. the phenomenal self model);
  - c) As a precondition for containment (emotional holding capacity) and discharge of excitement into the ground;
  - d) The ability to connect and maintain relationships, to love;
  - e) The ability to tolerate the dissolution of boundaries of self or dissociation in the sense of connectedness with a higher power or spiritual dimension (transcendence);
  - f) Connectedness with ones own history, understanding of ones biography;

As Bioenergetic therapists we expect that the importance of embodiment and grounding in particular will be reflected in findings of neurobiology. Nonetheless, it is relieving to really find these scientific roots in neurobiology, systems theory and modern philosophy. This can be helpful to explain our knowledge to the modern world that believes in scientific proof. Lowe, like Freud, was eagerly looking for biological explanations and he connected his concept of grounding to the phylogenetic development of the human species (c. Lowen 1958, p. 70ff.). Our unique development has been inseparably linked with the evolution of the *upright gait* and thus our hands became free for using tools. Learning by imitation and playful acquisition of skills in the group then represented an essential advantage for survival. The precondition of a development viewed in this way is a tremendous achievement of integration of the signals. These signals come from the organ of equilibrium (vestibular system) as well as touch and perception of position in space/depth sensitivity (proprioception). All these systems of the body developed in the brain so that upright walking became possible. This is one of the many explanations for the eminent significance of grounding. The neurobiological implications of this subject and their applications in therapy will be the *first part* of this article.

*Cooperation* in hunting or gathering bands led to a further developmental leap. For this reason refining of the exchange of signals became increasingly

important, and that encouraged affect attunement by facial expression and collaboration by gestures as well as the development of language<sup>2</sup>. Recently, in the discovery of one of our ancestors, “*Ardipithecus ramidus*” researchers discuss that the *cooperation* of the parents in bringing up the infants was an important step in human evolution (Lovejoy 2009). The upright gait and thus new form of grounding as a unique characteristic of our human species is not to be found in early childhood. The baby needs to be grounded in the relationship to his/her caregivers and its excitement and affects need their help to be regulated, either to be calmed (discharged) or to be stimulated/vitalized. Lowen (1958, p. 108+56) points to this: “... and reality for the child is its mother.” It is fascinating that the research of the primary triangle of mother, baby *and* father shows that contact and mutual affect regulation needs is based on the orientation and organization of the lower half of the body that according to Lowen (1958) is closely connected to grounding. The *second part* of this paper involves the developments and therapeutic implications of this triad research. In the developing infant the intense struggle for his own upright gait, grounding and consciousness can be observed easily. The developmental steps of phylogenesis are thus reproduced in ontogenesis.

The development of our embodied self, our selfhood, in the first years of our lives can be subject to limitations, disturbances or traumatic events (Stern 1985, Schore 1992). The outcome of such events we will find in our clients with “early” disorders. Three case examples are included in this paper to illustrate the value and therapeutic use of the principles and knowledge described here. Like in childhood our therapeutic affect attunement and collaboration is not and should not be perfect. Miscoordinations or interruptions in affect attunement or collaboration always need to happen. The important step for the development of the baby and our patients as well is the reestablishment/reconstruction of attunement and collaboration in the relationship. Within the therapy process this reconstruction of the collaboration and affect attunement is fostered or enabled by a process of “*deconstruction*” of the perspective of patient and therapist. This is the subject of the *third case vignette* of this article.

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2 A further development of my ideas concerning this subject you will find in: Forum der Bioenergetischen Analyse 2011.

## **PART 1: NEUROBIOLOGICAL ASPECTS OF EMBODIMENT AND GROUNDING**

In Bioenergetic therapy grounding can be seen as an important acquisition to prevent experiences of dissolution of boundaries, dissociation and loss of reality. The developmental model of Bioenergetic Analysis expanded by the results of infant, attachment and neurobiological research offers an understanding of therapeutic relationship and processes, which provides a safe frame and developmental space for patients suffering from personality disorders. It led to an emphasis of a safe therapeutic working relationship as well as differentiated approaches of treatment for individuals with different life experiences and types of disorders (Heinrich-Clauer 2008). Also, grounding circumscribes the holding a person receives through the voice, eye contact, touch, and physical contact in relation with another person too. Rootedness, i.e. the building of a secure self-structure with the perception of their own body and the therapeutic relationship is particularly important for patients suffering from disruptions of the coherence of self. "Relationship has a grounding effect for the therapeutic process [...]. This view does not contradict Lowen's notion that grounding can be achieved mainly through the energy flow in legs and feet and the contact with the ground of an individual. But it is not just a question of grounding techniques, whether clients in the therapeutic situation are able to be really grounded or not ... In order to be able to integrate the doubtlessly stabilizing and vitalizing experience of the energy flow in legs and feet and the good feeling of ones own stance in the therapeutic situation into ones sense of self, a relational response of the present therapist is essential. Clients need to be able to relate to themselves and to the other while perceiving body sensations and trying to communicate them verbally. *Relatedness of the therapist* means mindful looking, sensing and listening as well as the ability to verbally confirm and propose words for the integration of the experience" (Heinrich 2001, p. 68 (tba.)).

The first case vignette elucidates the importance of the inclusion of resonance (Heinrich-Clauer 1997 and 2008), grounding and exploration of one's own body in a critical situation to foster integration processes.

## CASE VIGNETTE 1: A HALLUCINATORY EPISODE

A 55-year-old female teacher suffering from sleep disturbance, alcohol dependency, severe depression, dependent-narcissistic personality traits and living in a traumatizing relationship was in inpatient treatment. In addition to verbal psychodynamic individual therapy with me, she worked with concentrative movement therapy (CMT) in a group setting. After a couple of weeks she appeared to be stabilized and abstinent from addictive substances. One Friday afternoon I received a phone call from the CMT colleague. With an excited voice she described her distress with the patient. Later on, when I was alone with the patient in my office, I understood my colleague being so upset. In front of me I saw a sweating, highly restless, fearful patient. After a while, in spite of my own tightness, I managed to find out what she experienced bodily and mentally. She felt helplessly and physically exposed, because she saw the big erect genital of a man on the wall. (I suppose she suffered from an alcoholic hallucinosis. Background for the form of the hallucination was that she was daily forced by her husband to have intercourse with him.) For a while I felt downright uncomfortable in this emotionally charged atmosphere and shared her helplessness. Then I noticed how in my standing position I involuntarily worked (like in Bioenergetic exercise groups) into my legs and ankle joints in moving with slightly bent knees gently back and forth in my feet and ankle joints. [I was looking for a secure stance and in this way dealt with my feelings of insecurity and helplessness.] I invited the patient to try something similar as I did and also to stamp lightly with her feet on the ground. When she hereupon had somewhat quieted down, I asked her to describe the apparition on the wall more precisely. In touching the wall with my hand I managed to encourage her to explore the wall at the place of the apparition together with me. In this process she became quieter and the hallucination disappeared. After this her therapy made significant progress, as the work on her conflicts and traumatization was enhanced by this episode.

Conclusion: Instead of exploring the obvious fear and transference situation (which would have needed more contact with reality from the patient) I relied on my experience as a bioenergetic therapist and helped my patient and myself in this critical situation with grounding and contact

with reality. In the therapy situation I shared the feelings and excitement of the patient implicitly in my embodied countertransference (resonance) and carried (contained) them with her. The perception of my resonance opened for me a way to direct the attention of the patient to her body, her contact with the ground and then to re-establish contact with reality together with her. Beside containment/grounding of the therapist, the patient's *contact with the ground* and the mutual *tactile exploration* and the *touch* itself were important elements of the therapy process. "Bringing one's self back to a sense of the feet on the ground allows one to bring oneself back to an ongoing sense of self-regulation and self-respect." (Helfaer 1998, p. 70).

#### GROUNDING IN THE THERAPEUTIC RELATIONSHIP

Grounding, either in the standing position or by sitting in front of each other, enhances the orientation to the reality principle, adult functioning, (i.e. the integrative ego-functions) and guides patients in their exploration. Settings based on the lying position can have a regressive function. When the relational context and experiential background of the patient are disregarded they can lead to dissociative phenomena, depersonalization and ultimately psychotic decompensation. Reinert (2007, p. 504f.) a psychoanalyst, describes such cases and takes them as a cause to caution against: "Dangers of the inclusion of the body in therapy: More severely disturbed Borderline patients with insecure ego-boundaries would be massively overstrained by such an immediate confrontation with their physical experience." He describes a patient, "with a Borderline structure with severe secondary addictive disorder ..." (Ibid.). In his first therapy session already in the lying position without an instruction that would have provided a framing by the therapist, the patient got into severe dissociation and states of excitement. As a bioenergetic analyst one misses here the application of therapeutic (grounding) principles providing for structure and holding and a discussion of the effect of the relational context. Without working on contact with the ground (reality principle) and without exploration and clarifying of the relationship with his own body as well as with the therapist, a lying setting for such patients is hardly imaginable for a Bioenergetic analyst. The significance

of physical interaction and grounding in the therapy process of a borderline patient will later be the subject of the second case vignette.

The very experience with events of dissolution of boundaries has led to a further development of Bioenergetic Analysis. Especially important is the integration of impulses from the face musculature (emotional perception) with those of body movements (ibid. p. 44). Body movements, our expectation of movements and intentions are mainly directed by the integration of information from depth sensitivity (proprioception), sense of equilibrium and touch (Blakeslee & Blakeslee, hereafter referred to as B&B p. 29). According to the Bioenergetic concept of “cephalic shock” (Lewis 2008), the integration of this information can be disturbed by a layer of tension at the base of the skull and in the region of the eyes (Lowen 1978, p. 58). These tensions lead to disintegration or lack of integration of information coming from the organ of equilibrium, visual perceptions and depth sensitivity. Lewis related his concept to Winnicott’s concept of the “false self”. He described the physical side of dissociation, which according to Schore (2002), is an outcome of trauma-induced developmental disturbances. Seen from the perspective of developmental psychology, the infant lacks the holding of body and soul, which is the foundation for the development of a cohesive self. According to Bioenergetic experiential knowledge, the integration of body perception can be seen as surrounding the center of the diaphragm/Hara/like an onion. From the perspective of the functional unity of body and soul, the area at the base of skull and around the eyes functionally corresponds with ankle joints and feet. Sense of equilibrium, secure stance and the ability to let oneself down into the ground are as disturbed as the ability to surrender to a partner in a relationship.

THE TRUE SELF AND OUR CONSCIOUS MIND  
IS ROOTED IN PROPRICEPTION

*The central anchor of our true self in the body is the proprioceptive sensations.* Winnicott (1974, p. 193f.) was engaged in this subject: “The true self comes from aliveness of body tissue and the agency of body functions including the functioning of heart and breathing ... The true

self emerges as soon as there is some psychological organization of the individual, and it means little more than the totality of sensomotor aliveness.” “Whenever conscious experience occurs (i. e. activation of a stable integrated model of reality [in the brain, author’s note]), also this continuous source of inner, proprioceptive input exists” (Metzinger 2005, p. 19; hereafter quoted as Met. (tba.)). Damasio (2000) refers to this as *core self*, (a term used by Stern [1985] for the development of the infant) that is dependent on the constant neuronal activity of those brain regions of the body self, which are independent from external input (that means independent from sensations like seeing and hearing). In bioenergetic therapy we experience this fact in patients with diminished grounding and fear of falling. They try to compensate the insecurity within their self and their contact to reality by controlling the world by visual information. If they close their eyes they may lose their sense of equilibrium, feel very insecure and may get in a panic.

### **1.1. EMBODIMENT AND GROUNDING FOSTER THE COHESION AND VITALITY OF THE SELF**

Our self-perception (and introspection) is not a passive reception process but an active construction procedure (B&B, p. 41). Disturbances of body perception or integration of body maps in the brain leads to disturbances of the cohesion of the self. These have been investigated thoroughly by self-psychology. Early traumatization of the infant (by violence, abuse or neglect) instead of developing a vital and cohesive (integrated) self (-model) leads to depressive-depleted/devitalized or *fragmented/dissociated* self states (e.g. Lichtenberg 2000, Schore 2002). Depleted/devitalized self-states we find in depressions that are frequently connected with a sense of emptiness and missing holding, a silent void or black hole of nothingness, a groundlessness (Clauer 2007, Schore 2002). The importance of the stimulation of body perception and grounding in the case of depression is part of our common knowledge in body psychotherapy (e.g. Lowen 1972, Clauer & Koemeda-Lutz 2010).

During growth spurts of children and adolescents there frequently



occurs a temporary disturbance of proprioceptive perception of the body and a sense as if they have lost their feet or legs (B&B, p. 29). Difficulties in adolescents of orientation in reality that correspond with this loss of grounding are well known. Their urge for motor activity might have a self-healing effect in this process. Like in a young mammal, feedback from its own bodily movements provides meaning to what it experiences.

There is a similar state of “hovering above ground” associated with restriction of contact with reality in depressions and psychoses. As a psychiatrist I have experienced a number of floridly paranoid-hallucinatory patients, who “hovered above ground” on their toes during a phase of deep fear. B&B have described how the impairments of depth sensitivity and sense of equilibrium can lead to illusionary misperceptions.

Proprioception is the predominantly unconscious perception of position and movement of our muscles, bones, joints, sinews and skin. “An especially large number of such sensors is situated in the facial skin, the *soles of the feet* and in the fingertips” (Storch, hereafter quoted as Sto., p. 96). The integration of depth sensitivity, sense of equilibrium and touch therefore can very well be enhanced by *stimulating the soles of the feet in various ways* as well as by dynamic grounding (Steckel 2006), and can be enhanced by Do-In exercises<sup>3</sup> (Clauer 2007). “Flummies” (small hard rubber balls of 2.5 (to 3.5) cm of diameter, i. e. one to one and a half inch of diameter) have been found to be very effective tools for stimulating the sole of a foot by stepping with one foot on the ball and slowly rolling back and forth (Vita Heinrich-Clauer, personal communication).

#### COHERENCE OF SELF IS ENABLED BY INTEGRATION OF “BODY MAPS”

Neurobiology and philosophy arrive at the same conclusion, that rootedness in the bodily self and especially in proprioception represents the foundation for ever more complex levels of consciousness. *Proprioception – integrated with sense of equilibrium, touch and somatovis-*

3 “Do-In” is a collection (set) of exercises (practices) and teachings about physical and mental development of the human being (Kushi 1994). I refer here to the part of “General practices”, changed and supplemented by us. These exercises are a form of self-massage, which mobilizes especially the body surface, joints and musculoskeletal system.

*ceral sensations – is a central indispensable component of grounding and rootedness in the bodily self.* “The “balancing disk”, also known as the “wobble board” can be an important tool in Bioenergetic analysis to foster the integration of these body senses, especially proprioception and sense of equilibrium. It has been applied independently by V. Heinrich-Clauer, K. Oelmann (personal communication), Clauer (2007) and Ehrensperger (2006) with many types of disorders. Alternatively the “airex balance pad” may be used (personal communication, H. Steckel). The neural integration of the different internal information of our body (self-awareness) in our brain seems to be a crucial process and step. Putting some pieces of the puzzle together might give us an important impulse for Bioenergetic therapy. In the treatment of diseases with disorders of body schema and body image for instance (psycho-) analysis of affect attunement, transference and countertransference *alone* are insufficient. “To bring the clients bodies and minds back together – to fire up their body schemas [...] you need to try something more direct, more dynamic, more tactile, more proprioceptive. [...] The wobble board provides a powerful entry into body schema repair via stimulation of the vestibular cortex. By putting balance at the center of attention, your body schema cannot be ignored” (B&B, p. 45f. cf. Bauer 2002, p. 190).

“Basically there are four types of internally generated information, which create a persisting functional link between the phenomenal self model and its physical base in the brain” (Met. p. 19 (tba.)): input from the *vestibular system* (sense of equilibrium); input from invariant parts of the *body image* (mainly *proprioception, touch*, temperature, pain); *somato-visceral* information from the intestines and the cardiovascular system; and input from brainstem and hypothalamus (that provides background emotions and moods, anchored in the biochemical landscape in the blood). B&B refer to the particular representation of the information in different neural networks of the brain as “*body maps*”: “The sum total of your numerous, flexible, morphable body maps gives rise to the solid-feeling subjective sense of “me-ness” and to your ability to comprehend and navigate the world around you. You can think of the maps as a mandala whose overall pattern creates your embodied, feeling self” (B&B, p. 12). An integrative system in the parietal brain seems to be part of the formation of the mandala, i. e. a representation of the system as a whole (B&B,

p. 51). The process of ‘sensory integration’ is an important long lasting process in childhood development up to the age of seven years and can be disturbed by many different reasons (Ayres 2002). The final classification and stable self-model seems to be a construct of the frontal brain. It needs circuits in a network between parietal brain and an analytic region in the frontal brain (Heinen 2010). The *embodied sense of self* corresponds to the existence of a *single, coherent and temporally stable self (model)* that is known as *selfhood*<sup>4</sup> i. e. prereflexive familiarity with oneself (Met. p. 8, 17, (tba.)). This means nothing less than the functional centering of the phenomenal space (of the experiential irreducible ego sense) through physical anchoring. *When this physical anchoring is lost, the coherence of the self is also lost* with the consequence of denials, dissociations or ego disturbances like e.g. psychoses (ibid. p. 16f.). The formation of (higher) neural patterns (of the self-model) has to be embedded in body perception, otherwise hallucinations predominate. Concerning dissociative identity disturbances, the integrating system uses different and alternating self-models and the integration (e.g. of the optical and proprioceptive map) occurs not at all or in a distorted way (Metzinger 2005, p. 17f.). In the context of dissociative disorders, grounding has proved of value also in trauma psychotherapy (Bercelli 2005, Clauer 2007) to discharge the “frozen residue of energy” and enhancing body awareness and self-possession. The recalibration of body maps is a key to healing trauma (B&B; p. 48).

## 1.2. DISORDERS OF BODY SCHEMA AND BODY IMAGE: TOUCH AND CONTACT

Another form of the missing integration of the “body-maps” is to be found in eating disorders and (body-) dysmorphic disorders (e.g. dysmorphophobia), where the body scheme, the *integration of touch with depth sensitivity (proprioception) and sense of equilibrium* is changed (B&B, p. 51f.). Individuals with binge eating feel dissociated, as if body and brain inhabit mutually exclusive worlds.” (B&B, p. 45). Modalities

<sup>4</sup> Speaking of selfhood, Lowen (1984, S. 111) says it is comprised of self-awareness (self-perception), self-expression and self-possession.

that use body sensations as a key to healing (like Bioenergetic analysis and other physical therapies) enhance awareness and attentiveness, they recalibrate your body maps (your body schema awareness, which is mostly implicit) so that you can feel yourself from inside out and self-possession is enhanced (B&B, p. 37+48).

Beside the improvement of self-awareness, Bioenergetic psychotherapy also will address the more conscious body image and the shame affect and the system of self hate (Helfaer 2007, p. 63+67). The feeling, “who I am is shameful and that my body, body parts, and bodily expressions are shameful” will prevent self-respect and trust in being touched. The “body image” is a concept for our emotional response to how we experience our body, including how we dress, pose, move, and *believe others see us*. It is embedded both in our body maps and in the parts of our cortex that store our autobiographical memories and social attitudes and so can be drenched in shame (B&B, p. 42f.). Especially important in this respect is the integration of impulses from the face musculature (emotional perception) with those of body movements (ibid. p. 44).

Anorexia patients hate to be touched and they leave situations in which they are expected to have body contact with others. Research further suggests that they are suffering from such a mismatch between body maps of touch and vision, that their body schemas are unreliable (B&B, p. 50f.). In an experiment, a full-body neoprene suit an anorexic patient wore stimulated the tactile perception. “Before she wore the suit, when she was starving, her left hemisphere was dominant. After she wore the suit – and had gained several pounds – brain activity shifted to her right hemisphere, particularly to the parietal lobe” (B&B, p. 52). The integration of the brain maps in the right parietal lobe seemed to be restored.

We might connect this to the work of Schore (2002): “Traumatic attachment experiences negatively affect the early organization of the right brain,” (p. 462). “Schore further stresses that the right hemisphere is centrally involved in the analysis of direct information from our own body ... due to the fact that it contains more than the left extensive reciprocal connections with the autonomic nervous system (ANS) ... The energy-expending sympathetic and energy-conserving parasympathetic circuits of the ANS generate the involuntary bodily functions that represent the somatic components of all emotional states (p. 445).

Mutual pleasant touch (especially on the front side of the torso) contact and sexuality with another being stimulates the parasympathetic system and raises the oxytocin level. Oxytocin is the hormone of calm and connection, of healing and growth. Touch not only creates an emotional bonding but also transmits the positive health and anti-stress effects of oxytocin (Uvnäs Moberg 2003, p. 89+127). “Touch is beneficial for human growth and health” (Ibid p. 111). So this might be an important effect in anorexics – that touch enhances parasympathetic inner responsiveness with the oxytocin balance and counteracts in this way the fight-flight-mechanism (and traumatization).

Touch and contact proves to be important for the healing of at least some patients with early disturbances like anorexia nervosa. The same (combined with balance and viscerosensitivity) I found to be the case for a patient with Colitis ulcerosa (Clauer 2007) where it was important too that: “Vestibular signals are intimately tied to touch ... Nothing stabilizes balance better than light touches and contact with the environment.”(B&B, p. 30f.). The integration of body maps of viscerosensitivity and of the brainstem will be fostered when we are working with breathing and other body rhythms (e.g. Buti-Zaccagnini 2008).

### **1.3. BODY PERCEPTION (PROPRIOCEPTION, TOUCH AND SENSE OF EQUILIBRIUM) AND ITS INTEGRATION AS THE FOUNDATION FOR CONSCIOUSNESS AND COHERENCE OF THE SELF**

Like grounding, *selfhood* is an important concept of Lowen’s (1983, p. 111f.): “The goal (of bioenergetic analysis) may be described as the attainment of selfhood, which is comprised of self-awareness, self-expression and self-possession. Being aware of oneself means being fully in touch with the body, but that is possible only if the person gains insight into the unconscious motivations of behavior. Self expression denotes the ability to sense and express all feelings, while self possession means that one is in conscious command of this expression.” Neurobiology, systems theory and the philosophy of the “self model” have

also demonstrated the inseparable unity of psychological and physical experience and the rootedness of the self in the body.

From the viewpoint of systems theory we are self-organizing systems, whose conscious, increasingly complex, processing abilities rest on (recognizable) formation of neural patterns. Keeping Lowen (1978, p. 55) in mind: “Grounding roots a person in his animal or physical basic functions and in this way nourishes and supports his mental striving”, we recognize that today’s systems theory comes to a similar conclusion: that non-verbal, unconscious processes based on mental self-organization driven and shaped by feelings, body sensation and situation form the foundation of *intelligence*. (Storch et al. 2006, p. 34, (tba.)). Intelligent cognition (thinking as formation of neural patterns of a higher order) is unthinkable without it being embedded or rooted in body perception *and* without perception of the environment. (Sto., p. 30f.).

Neurobiological research even transcends this view and arrives at the conclusion that perceptions (of environment) make no sense except in the reference system of our embodied self: “As a young mammal in its formative stages moves around, feedback from its own bodily movements provides meaning to what it sees [...] If an animal is exposed to high-quality visual information but only as a passive observer, its brain will never learn what any of that visual information is supposed to mean. [...] The same goes for all the “special” senses: The body mandala is their central integrator, the mind’s ultimate frame of reference, the underlying metric system of perception. Sensation doesn’t make sense except in reference to your embodied self. [...] In contrast, vision or hearing without a body to relate sights and sounds to would be nothing but psychically empty patterns of information. Meaning is rooted in agency (the ability to act and choose), and agency depends on embodiment. [...] *Nothing truly intelligent is going to develop in a bodiless mainframe. In real life there is no such thing as a disembodied consciousness.*” (B&B, p. 11f.). This point of view was supported by research concerning artificial intelligence: “While we can readily use disembodied computers to manipulate symbolic information, intelligence requires interaction with the world. In this view embodied cognition ... emphasizes what is enabled cognitively by having a body. Ironically, this knowledge turns out to be exceedingly difficult for robots to acquire ... embodied cognition leads

to gains of cognitive function. There is growing evidence from studies in athletes that physical experience can improve perceptual ability” (Grafton (2009, p. 98).

A central subject of the “philosophy of a self-model” and of consciousness of Metzinger (2005, 2009) is his so called “phenomenal transparency”, that I conceive of as a necessary fact: Not to know that our subjective feeling of me-ness or selfhood is only an neurological construct of our brain and to experience our self in direct and immediate (online) contact with oneself and the world is an important and necessary precondition, so that we are able to function in the world and enjoy it! “Phenomenal transparency” (ibid. p. 21f.) means that we are experientially not able to recognize the “self-model” created in the brain as such; instead of we experience ourselves as if we were in direct and immediate epistemic contact with ourselves.

Metzinger further elaborates: “From a transparent model of the system, a self emerges that is embedded in this reality [...] a dynamic phenomenal *online* (author’s choice of word) simulation of the self as a subject integrated in the world by constantly changing relations through knowing and acting” (ibid. p. 25). “Malleable and ever more complex self models allow, not only an ongoing optimization of somatomotor, perceptual and cognitive functions, but later on also social cognitions and thereby the development of *cooperative behavior* (emphasis by the author). With them emerged the fundamental representational resources for adoption of perspectives, empathy and guilt, later on also for meta-cognitive accomplishments e.g. the development of a self-concept and a *theory of mind* (ibid. p. 11).

## **PART 2: THE TRIAD RESEARCH: COOPERATION IN CHILD DEVELOPMENT AND BODY PSYCHOTHERAPY**

### **2.1. FROM DYAD TO TRIAD AND COLLABORATION**

During the last few decades, infant and attachment research have changed our psychotherapeutic work. Developmental research was

mostly concerned with the dyadic relationship and the significance of our emotional attunement. For access to awareness and consciousness, psychoanalytic authors underline the experience of affect attunement, of attachment and intersubjectivity as privileged compared to interaction (e.g. Lichtenberg et al. 2000, p. 124). Research on the family triad, i.e. the interaction of infant, mother *and* father represents a connective link and has emphasized the significance of the *cooperative interaction* (Fivaz-Depeursinge & Corboz-Warnery 2001, hereafter quoted as F&C). The physical organizing principles of cooperation in the triad described in this research fascinated me, since I recognized their value in my therapeutic work with adult patients. The ability for cooperation is among the highest developed cohesive self-functions of the human being (Met, p. 11). Downing (2007, p. 558f.) referred to cooperative interaction as “collaborative connection” (i.e. mutual coordination for the accomplishment of a practical goal). He highlights it as an important independent category of intersubjectivity: “If it is correct, that the ability for cooperation follows its own separate strands of development, then its inclusion (in therapy, author’s note) is virtually called for” (Downing 2007, p. 561).

At least for the development of the child and the family alliances, “cooperation, liveliness and grace prevail over adversity” (F&C, p. 9). After finishing this paper this perspective was supported by the recent scientific discovery of one of our ancestors “*Ardipithecus ramidus*”. There is a discussion that the male for the first time in phylogeny became a partner in the *cooperation* of the parents in bringing up the infants. The new perspective is that this could have been an important and possibly crucial step in human evolution (Lovejoy 2009).

## 2.2. THE “LAUSANNE-TRILOGUE-PLAY”

In their “Lausanne-Trilogue-Play” F&C have investigated play scenes of infant, mother *and* father (known as the triad) during the child’s first year of life in a standardized frame using video recordings. The defined and specified task consisted of four determined segments of play. First, one parent was supposed to play with the infant, then the other parent



and then the three of them together, and finally the infant sits with the parents while they communicate with each other. Each time the adult has to orient his/her body in the distance and closeness to the child that is specific for the situation. The infant is dependent on this parental frame, which guarantees its *participation* and abiding by its role in the play, so that it can keep its attention and is able to regulate its affects (F&C, p. 69).

As in any setting of communication such as this complex situation, miscoordinations occur too. The task of the triad principally consists of restoration of cooperation and (affect) attunement, so that it becomes possible to be together in a joyful way (F&C, p. 99). Without being interested in the participation of the others the organization and procedure of mutual play and regulation of affects do not succeed. The infant is an active partner in this, who tries to facilitate communication even between the three of them. Right from the beginning of the infant's life, successful cooperation of the parents with each other and with the infant is especially supportive of its development. For this to happen, it is relevant that the mother is interested in the involvement of the father, where she seems to have a "gate keeping" function. Her interest in the participation of the father depends on his sensitivity for the needs of the infant and her needs. Interestingly, the marital satisfaction of the fathers predicts the frequency of infants referencing to their fathers and the quantity and quality of his participation in parenting. The ability of the infant for the trilogy communication correlates to a high degree with this competence of the father. Males as husbands and fathers are more vulnerable to stress and conflict with their partners than are females as wives and mothers. (F&C, p. xxxix+175; Dornes 2006, p. 298+304). The stress sensitivity might be connected in some way to the differences in the oxytocin physiology of male and female (Uvnäs Moberg 2003, p. 5+176f.). It is: "interestingly enough, that coordination, whether of cells, effects, or individuals, is a marker for oxytocin" (ibid. p. 56).

As a consequence, missing participation of one (or more) partners of the triad may lead to disorganizing patterns of communication (and maybe attachment) and thus to severe disruption of the infant's self-development. (F&C, p. 50+76f.102; Klitzing 2002, p. 878). The growth, development and the future of infants are dependent on the cooperation of the parents. This

cooperation needs the participation of both parents as a couple with different mutual contributions due to different requirements interdependent of role differences and/or only for their special biological functions. For the development of the infant as well as the future of our society and higher order of intelligence, it is not the highly valued independence, competition and power that are beneficial but cooperation, touch, physical contact and love, which are often underestimated. (Cf. Uvnäs Moberg 2003, p. xi+177). Secure attachment grows with the sensitivity of the mother to comfort the baby and the sensitivity of the father in the play with the infant. The ability for triadic relations grows with triangulation of the parents in respectively cooperative family alliances (Dornes 2006, p. 318, tba.). Attachment and cooperative family alliances or collaboration now seem to be separate strands of development (E. Fivaz-Depeursinge, 2010, personal communication at the 12<sup>th</sup> world congress of the “World Association for Infant Mental Health [waimh] in Leipzig, Germany).

### **2.3. PHYSICAL HIERARCHY OF FAMILY COOPERATION AND THE GROUNDING CONCEPT**

The evaluation of family cooperation research done with three and nine month olds as well as follow-ups of four-year-old children have been analyzed. The differing ability of parents to cooperate in so-called family alliances is already evident in the developmental stage of the basal or body core self (in two or three month old infants), and can be seen on four levels of physical interaction:

1. Pelvis = *participation*: the *orientation of the lower body* to each other is foundational and crucial, whether all three partners in the relationship are included in the play (basic rootedness of social interactions).
2. Torsos = *organization*: the relation of the upper body (shoulders) indicates, whether each partner is aware of his/her role (*turns to* the other in the appropriate distance).
3. Gazes = *focus of attention*: the position of the head (direction of look) indicates whether all three partners are able to create a shared focus of attention.

4. Facial expression + voice = affective contact: expressive behavior indicates (analogous to dyadic play) whether each partner is able to initiate, develop and maintain affective contact and thereby emotional intimacy.

So in playing, the partners have to attune on differing physical levels. In doing so their lower body is placed in one spot and this position is kept as a rule. Their upper body is moved from time to time and has to be brought to the appropriate distance; head and look are newly oriented very often; facial expression, vocalization and other forms of expressive behavior change extremely quickly. Considered together, the four physical levels of interaction as hierarchical system form the triangular framing for play, affect attunement and development of the infant. Like in a developmental pyramid, the highest level of affective resonance is impossible without the previous levels of physical attunement: “The most encompassing and invariant components (the participation formations) exert a stronger influence on the least encompassing and most variant ones (the affective contact formations). We refer to the stronger forces as *contextual* and to the weaker forces as *implicative*” (F&C, p. 70). The *participation of the partners in the communication*, which is crucial in such a context, depends on the physical orientation of pelvis and legs for this to happen (the lower half of the body is connected with grounding). This basic framing of the play can be seen as a precondition for the later development of autonomy and grounding of the child. Thus the importance of the grounding concept is expanded by a developmental psychological perspective and dimension.

#### 2.4. EFFECT OF DISRUPTIVE COOPERATION FOR CHILDHOOD DEVELOPMENT

The trilogue research has revealed two dysfunctional (*disordered and collusive*) frameworks of family alliances when parents have only low cooperative co-parenting and framing abilities for containment of interaction and play. So-called *disordered family alliances* are characterized by a paradoxical relatedness (called *paradoxical triangulation*)

with absurd corrections in the case of disruptions of attunement. Thus a participation of all three in the play is not possible, a collapse of cooperation is pre-programmed. The infant experiences *no participation* in shared interaction, but is helplessly exposed to the chaos of his parental environment. This means that already the *grounding*, the relation of the lower bodies with each other is disrupted. In that process the triadic abilities of the child are used and distorted in a paradoxical way (F&C, p. 102f.). Such chaotic relatedness with intrusion or withdrawal is also an indicator of the *disorganizing attachment style*. Disrupted family alliances may lead to the development of Borderline disorders. This would validate cooperation as an important independent category of intersubjectivity that follows its own separate strands of development. A recent investigation highlights the fact that, “individuals with BDP (borderline personality disorder) showed a profound incapacity to maintain cooperation, and were impaired in their ability to repair broken cooperation on the basis of a quantitative measure of coaxing” (King-Casas et al. 2008, cf. Schroeter 2009). How will these pieces of a puzzle fit together? Bioenergetic Analysis focusing on the physical dynamics and the cooperative strands of development might contribute to that puzzle (by focusing the cooperative or collaborative aspects in therapy).

In so-called *collusive family alliances* aggravating or evasive correction of miscoordination occurs caused by the parents. This leads to an affectively artificial context, which tries to maintain the appearance of cooperation (what later on might arise in alexithymia of adults). The (parentified) child from the beginning has the task to be the guardian of the unity of the parents as a couple. In order to prevent the disintegration of the connection of the triad, in these role-reversing families the child has to bring his own triangular capacities into service for triadic relatedness and affect regulation. The child has to provide for a frame for the conflicting and competing parental relations with a tremendous effort that is holding them together to pacify the parent’s relationship. Receiving this framing from the parents would support the very important secure intergenerational boundaries with containment and holding for the baby. This form of cooperation is called *detouring triangulation* (F&C, p. 178f.). According to the insights resulting from the Lausanne-

Trilogue-Play the position of the upper body (torso) is connected with the organization or abundance by roles in relationships. In the course of the development of the infant's triangular capacities, the theme of exclusion from the parent's control field in its second year of life may be of special importance for these subgroups (Fivaz-Depeursinge et al. 2010, p. 137). If my considerations are conclusive, they might be helpful to explain the characteristics that can be observed in patients suffering from somatoform (and psychosomatic) disturbances: the therapist has to be especially careful to stick to his role, to his function as an empathic and supportive relational partner with clear boundaries, who provides for a frame. In this role he has to be authentic and to provide for information and knowledge (Morschitzky 2007).

## 2.5. RELEVANCE OF RESEARCH

Research about the primary triangle is equally relevant for psychoanalysts as well as for body psychotherapists:

1. Hierarchical physical foundations for patterns of communication are described in a differentiated way.
2. Fonagy et. al. emphasize the significance of affect attunement and mentalization for the development of the self and its disturbances: "In this way in the core of their self structure (of the insecurely attached infant, author's note) the representation of the object becomes imprinted, not the one of the self" (Fonagy et al. 2004, p. 472). Their reflections may not take enough into consideration, that the core of the self-structure represents an embodiment of the relational experience from a time before the acquisition of symbolic representations (cf. Lichtenberg 1989, p. 87, Stern 2005, Sto., p. 86). Even Fonagy and his group seem to now take into consideration the importance of embodiment more (Fonagy&Target 2007). Schore (2005, p. 414) emphasizes more explicitly: "... the defensive response of the child to trauma, the regulatory strategy of this dissociation becomes imprinted in the implicit-procedural memory system of the right hemisphere." In considering the primary triad, the independent significance of the cooperative physical interaction becomes

an independent focus of attention in addition to the significance of affect attunement and attachment (F&C, p. 55f.). Both areas are of importance for the development of the infant and are following independent developmental lines (Downing 2007, p. 561).

3. Disruptions in the cooperation of the parents with each other and with the infant, already by the age of three months, verifiably lead to different relational patterns, so-called family alliances. The patterns (of disruption) of such family alliances are quite stable throughout the first year of life and lead to characteristic developmental disturbances, which are detectable in the infant in the fourth year of life.
4. For the development of the infant the interplay of “affective connection (affect attunement)” and “collaborative connection (or physical cooperation)” was shown by video microanalysis (F&C). The connective link between them seems to be represented by the physical hierarchy of the attunement processes. For a coherent self and adult functioning both strands of development have to cooperate in an integrated way.
5. Like attachment, the triangular or collaborative strand of development undergoes some changes in the growing up of the infant. The infant’s triangular interactions precede rather than follow the advent of the oedipal complex. In the first year of its life the frustration of the infant in its triad dialogues is about a sense of *exclusion* from the parent’s *attentional field*. The second year comes under the *exclusion* from the parent’s *control field*, whereas from the third year on, it would concern the *exclusion* from the parent’s *intimacy*. This points to the importance of the family alliance and of the infant’s triangular capacity in determining the course of the child’s sexual development (Fivaz-Depeursinge et al. 2010, p. 137).

## 2.6. PSYCHOTHERAPEUTIC SIGNIFICANCE OF RESULTS OF RESEARCH ABOUT FAMILY TRIADS

According to the considerations above, grounding understood in this developmental psychological psychosomatic sense means that the *par-*

*ticipation* of the partners in the interaction (also in the psychotherapeutic dyad) is necessary (what actually seems self-evident). This means specifically, that *physical* (hierarchically structured) *orientation can* be an important foundation for the *participation of the partners in mutual affect regulation*. The participation can be encouraged in the therapeutic work and by attentiveness to the perception of the lower half of the body. In this way Downing's (2007, p. 561) general description of the significance of the cooperation with the patient is substantiated. Patients with a coherent self and stable ego-functions have a sense of an inner security (or mental representation) of this participation, even independently of (implicit procedural) physical patterns of participation according to my experience. On the other hand, patients suffering from personality disorders with disturbances of self-representations, fragmentation or dissociation, depersonalization, derealization, and/or disturbances of body image for instance may be lacking those secure physical and psychological representations.

The following case example may demonstrate the applicability of these reflections:

#### CASE VIGNETTE 2: PHYSICAL PARTICIPATION AS FOUNDATION OF DEVELOPMENT AND HEALING

I am giving here an account of the still ongoing treatment of a patient with Borderline personality structure. She is 41 years of age, married for four years, and has an extramarital son of 19. After several interrupted attempts to begin her studies at university, she works as a physical-technical assistant.

*About her history:* She is the fourth of five children. Her mother has never overcome the death of a child that died shortly after birth and was born before the patient. The patient experiences her as if she would like to slip into her mother from behind like into overalls using a zipper, in order to be able to control her in this way. The father is a devout farmer. His motto: the human being is fundamentally evil and the devil has to be beaten out of him. As an infant the patient was often ill and suffered from behavioral disturbances and developmental retardation that led to many stays at a health resort.

For a long time the patient used the third person when she talked about herself. She felt easily drawn into public attention, exposed and shamed. With her conviction that everything about her was wrong, it was difficult for her to protect herself and she responded by freezing. She suffered from strong constrictions and pain on the right side of her body, especially in the area of the head and jaw, also from tinnitus, panic attacks and anhedonia. The sense of her right eye uncontrollably turning away by itself was particularly alarming for her. She complained about frequent cramps in her feet, while her extremities normally felt ice-cold. The father of her child had almost killed her during their separation. A girl friend who had been present during this situation had lost consciousness. The patient had survived the situation because of her dissociative processing capacities, in her words by “talking down” what had happened.

*All beginnings are difficult:* she had a hard time getting involved with therapy, with at first one or two, later on two or three weekly sessions. The curriculum vitae I had asked her for she wrote only a year later. Each communication meant stress and panic for her. Only after some progress in her therapy she was able to write to me about how much she hated her body and was ashamed of her-self and her body. Just talking about her body was like being physically touched. In the relationship with men, thoughts dominated which she called childlike and stubborn: “Who cares what he thinks, just let him hit me.” Relational patterns like this occurred regularly in therapy, when she would hold her arm protectively over her head in panic. Then as a rule she had no memory of her written statements. “Intellectual knowledge” and “emotional experience” are dissociated.

Consequently she was extremely distrustful and at the same time expected that I simply sense her every inner stirring and know what she needs in each moment. She felt completely dependent on relational regulation by me without having any hope in participation. After some time she was able to illustrate her relational experience by means of a book and we found a comparison for her experience: “Like an Eskimo snow-child, that at the slightest inattention from my side will be left behind in the snowstorm and die miserably.” When we had “survived” her feeling storms for a longer period of time, the need in her grew: “But first of all we have to make contact in the first place”. After many



attempts we ultimately found for that a frame that I had proposed: we sit facing each other at a distance, so that I am able to put my forefeet (without shoes) on her feet. We had also experimented with her feet on mine. Now she asks for this kind of contact at the beginning of each session. It has become informative for the whole process of therapy and establishes a physical relatedness, which according to her feeling does not come *too* close. Her participation in the relational dialogue is in this way assured (as a rule). Even across difficult conflicts, she becomes rooted through her feet – as well in our relationship as on the ground. Abidance by the role, focus of attention and affective contact are still now and then disrupted depending on the intensity of tension – by turning away in the upper body, her look and closing of her eyes.

*Therapeutic dilemmas:* this kind of relational cooperation allowed us to keep the intensity of feeling again and again in a supportive middle realm. In strong tensions and when she was flooded by feelings the physical holding allowed her a piercing scream as a relieving expression. This was also for her a first tangible way to express protest and rage. She was thus less forced to dissociate or disrupt the connection, and to distort or turn away her upper body and the direction of her look less frequently. The setting and frame of the physical cooperation allowed also turning points or “now-moments” to arise. I mention here one of the most significant ones: during a bus ride three young women provoked a man with their giggling and screeching so much, that he “angrily had a go at them”. In this moment the patient feared for her and their life. When I did not share her fear and indignation during her narration without reservations and asked questions, we happened to get into a similarly acute conflict. At the same time she abruptly discontinued our contact with the feet – for the first time –, placed her arms protectively over her neck like in a trance and physically contracted. This did awake me: I became aware of the fact, that I resembled the man on the bus (or was identified with him. Seen from a psychodynamic perspective she experienced me in the role of father or/and mother and was afraid of parental rage and attributions of guilt). But in contrast to her history we were able to re-establish our connection and cooperation. I asked her after a while, how she experienced the situation and myself. She had experienced me as angry and threatening, felt helplessly at my mercy and felt no more participation

in the regulation of the relationship. After having told me about her experience it was vital for her, that I recognized “*my participation*” in what had happened – e.g. my angry feelings. In the following sessions she re-established contact with the feet. She referred to it as “melting in contact” (of the frozen snow-child with frozen icy feet).

After having worked through this episode she told me that she had perceived me for the first time as a person *separate* from herself with my own feelings and ambitions and told me that she was now increasingly frequently able to *remember*. She began to perceive her own angry affects in other relational constellations and then also toward the therapist – and she began to find words and meanings for her experience. Here is an example in her own words: “Where previously primarily was a war zone in absolute wasteland now sometimes a little house with a red roof, a little front garden with a little flower meadow happens to stand on/above ruins and bomb craters. It was hard work, to plough through the grey war zone. Very, very exhausting, because I fell into these bomb craters again and again. There were no living creatures at all, but just ice-cold wind and free expanse instead, no beginning and no end. There was *nothing* – no building material, no colors, no plants. However it went on, I do not know. Obviously I have decided to do something! ...”

According to the research of F&C, parents allow the infant with their cooperative framing to participate in the formation of the relationship and to abide by its role. In similar ways the therapist can create a reliable frame of participation and role organization. In the case above, the contact with the feet helped to ensure the participation. Secure framing of participation allowed the patient also to accept, with the orientation of her upper body, implicitly the role organization and enabled her to engage in eye contact and affect attunement. In this way she was able to see (in a double sense) the propositions and efforts of the therapist as such and to remember (explicitly the relational experience). At the beginning of therapy she felt hardly involved, looked rarely at me, distorted her head and upper body and in this way was hardly able to create a common focus of attention. The relational context was then empty or dissociated and lacked any mutual regulation (Schoré 2005, p. 454). Creation and maintenance of participation, role organization and focus of attention

that by now are possible are an expression of a new experience of relationship and allows for affect attunement.

When interruptions of affect attunement occur by now cooperation is possible, so that relational continuity can be re-established. Conflictual situations between patient and therapist frequently are crucial in the course of therapy. An intersubjective perspective, that tries to understand relational events as co-created (Beebe & Lachmann 2004, Clauer 2007, Orange et al. 2001) enhances the ability to leave the circle of attributions and counter-attributions more easily, to ask the patient about her perspective and inquire into the own perspective of the therapist and/or share it in part if required. By that process of “*deconstruction of perspectives*”<sup>5</sup> of patient and therapist (Beucke 2008), both perspectives are valued and the therapist can recognize his involvement in the evolution of the situation (Clauer 2007). The patient then feels comprehended (understood) again and seen (mirrored) in her perspective. This invited her to *participate* – instead of making her feel powerless or helplessness with a lack of feeling of self-efficacy (agency), feelings that have been so familiar to her. Her statements indicate that she thus has had the chance to experience the therapist as a subject. Current therapeutic work with this patient more frequently takes place on an intersubjective level, and there are increasing moments of encounter from self to self.

From the above follows without constraint: that the experienced participation, the grounding of the patient in the therapeutic dialogue is the more relevant the more the patient appears to be suffering from personality disorders. Even attentiveness and case related formation of the setting of the therapy might be ways to facilitate or establish participation and cooperation.

### CASE VIGNETTE 3: DECONSTRUCTION ON THE LEVEL OF “MICRO PRACTICES”

A patient with depressive and dissociative symptoms had come for almost three years twice a week to therapy. In her youth she had been

5 A lovely prose description of the “perspectivity of consciousness” and deconstruction can be found in Ende (1960, p. 124f.) in the chapter on the “Scheinriese” (literally: a giant who only seems to be one), who shrinks to his normal size when approached.

abused by her father for years and had never had a sexual relationship with a man. After progress at the beginning, the therapy seemed to be stuck for almost one year in an impasse. The patient felt like she had hit a wall, previous progress seemed to be reverted, and she quickly gained weight again. Welcoming in the hallway of the office was accompanied every time by her strange giggle. Although we recognized the context of the hallway with the experience of abuse and in spite of thorough “verbal” exploration of her perceptions and fantasies, the giggling for her remained unclear and unchanged. Before one session it was particularly intense and we both seemed to be so irritated by it, that after a while I proposed to repeat the scene of salutation. We investigated it a couple of times – like in slow motion on a video. In doing so the patient finally sensed a defensive response during our handshake, as she felt pulled by me. Previously, neither of us had been aware of this slight pull. In the process she experienced the connection to her father, who had “drawn her in his cellar” and abused her. In contrast I experienced myself with a friendly inviting feeling towards her. After that she was able to show towards me a clear response of building borders with arms crossed and a clear “No, not (anymore) with me”. In the times after that she experienced and repeated this again and again. Now she made developmental steps that reminded us of those of an adolescent girl. The giggling we understood now as an expression of her ambivalent feelings of “being drawn to” and she could then also show and experience a seductive quality. Now finally she also was able to work with “charge and contain” exercises (cf. Shapiro 2006). She gained a lot of profit from that regular work of changing her “flaccid” qualities both in the sessions and at home, which was not possible before the deconstruction process.

Our different experience of the situation of the salutation apparently had led to an unconscious impairment of collaboration and attunement. The exploration of the perspectives of patient and therapist, the “deconstruction” of the “how and where” of the bodily experience, and the exploration of the “physical micro-practices” facilitated a re-establishment and a new form of the (intersubjective) cooperation (Beucke 2008, Clauer 2009).

### **PART 3: CLINICAL CONSEQUENCES**

The body formations described in the frame of the family cooperation have systemic properties (cf. F&C, p. xl). They create (as for the infant) a foundation for the development of patients, without which the therapy primarily of patients suffering from personality disorders may be impeded. Even without clarity about these concepts and connections, most therapeutic modalities and therapists establish such a (hierarchically shaped) physical orientation with their patients. Psychoanalysis for example had to vary its standard procedure in the lying position without eye contact when working with patients suffering from personality disorders and in those cases works sitting position “face to face”. This facilitates implicit unconscious affect attunement of the partners of the therapeutic relationship affected by facial expression, but also the possibility of the unconscious bodily attunement and orientation to each other. In psychoanalysis, however, in its classical form this is done without touch!

I tried here to illustrate that our therapeutic options and possibilities are expanded by knowing these physical organizing principles (according to mental organizing principles, Orange et al. 2001). I do regard the knowledge about the foundations of the processes of our physical attunement and the motivational interest of the infant into intersubjective collaboration as an expansion or differentiation of the motivational systems as described by Lichtenberg et al. (2000).

#### **3.1. CONCLUSION**

Therapeutic work on the subject of relational problems and conflicts (mainly with patients suffering from personality disorders) does certainly not only consist of the physical interactions described above. I would like to emphasize this explicitly. But the additional observation, consideration and use of the bioenergetic principles of the organization of bodily cooperation/collaboration and grounding can be helpful, both for beginnings of therapy, within the process and in difficult therapeutic situations. At the same time the deconstruction of the perspectives

of patient and therapist can be helpful – not only on the level of thinking and affect attunement but also on the level of physical cooperation/micro-practices. In this way the participation of both of them in the interaction can be restored or ensured. Ultimately the main focus will be the interplay and integration of these two levels of our experience of relation.

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Dr. Jörg Clauer, born in Hamburg/Germany first became a biochemist and later a physician and medical doctor. He specialised in psychiatry, in psychosomatics and as a general practitioner. He started his psychotherapeutic education with Psychodrama, Bioenergetic Analysis (CBT) and with Body Enlightenment. Finally he became a Psychoanalyst and member of DPG and DGPT in Germany and IARPP as well. He has published articles on different subjects in a number of journals and books, for instance “Handbuch Bioenergetische Analyse” and is a member of the editorial staff of the german journal “Forum der Bioenergetischen Analyse”. For many years he was on the board of the Northern German Institute of Bioenergetic Analysis (NIBA) and was a founding member of the European Federation of Bioenergetic Analysis/Psychotherapy (EFBAP).

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