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Re-experiencing Pre- and Perinatal Imprints in Non-Ordinary States of Consciousness

Remarks on Stan Grof's Theory of the Perinatal Matrices – Invited Review –

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Abstract: This paper is intended as a survey of the basic theories pertaining to the birth process, as laid out by the psychiatrist, psychotherapist and consciousness researcher Stanislav Grof. After taking a short look at the developments in this century that led to a clearly increasing acceptance of Otto Rank's early insights concerning the 'birth trauma', we will focus on Grof's theory of the 'perinatal matrices', four distinct phases of birth, which he has discovered during the initial years of his now roughly four decades of research. Closely related to this core-theory is the understanding that, beyond the merely biographical level of the human psyche, there are perinatal and transpersonal dimensions of consciousness which profoundly inform our understanding of who we are and strongly influence our general outlook on life as such. Equally as important is Grof's concept of the 'CoEx's', the 'systems of condensed experience'. Holotropic Breathwork, a method to induce non-ordinary states of consciousness, is discussed as a means to access, re-experience, and integrate pre- and perinatal imprints and their effects on the life of the adult. The theoretical and experiential models Grof and his wife Christina have created provide explanatory tools for a host of psychological and medical problems. These tools seem to considerably exceed biographically confined models of the human psyche in their explanatory and healing potential. The paper is concluded with a commented personal account of a birth, and some final thoughts on birth and its relation to scientific epistemology and the current state of our specie's evolution.

This paper is dedicated to my friend Sue Frank, Boston, in love and gratitude.

I thank Ed Willard for his co-facilitation of Holotropic Breathwork workshops in San Francisco.

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Zusammenfassung: *Wiedererleben von prä- und perinatalen Eindrücken in veränderten Bewußtseinszuständen. Anmerkungen zu Stan Grofs Theorie der perinatalen Matrizen*. Der vorliegende Artikel befaßt sich mit einer Übersicht über die grundlegenden Theorien zum Geburtsprozeß, so wie sie von dem Psychiater, Psychotherapeuten und Bewußtseinsforscher Stanislav Grof erarbeitet wurden. Nach einem kurzen Blick auf Entwicklungen dieses Jahrhunderts, die eine deutlich zunehmende Rezeption der frühen Einsichten Otto Ranks zum ‚Geburtstrauma' zur Folge hatten, werden wir die Aufmerksamkeit auf Grofs Theorie der ‚Perinatalen Matrizen' richten, jene vier unterschiedlichen Phasen der Geburt, die er zu Beginn seiner nun ca. 40jährigen Forschung entdeckte. Zu dieser Kern-Theorie gehört die Einsicht, daß es über die lediglich biographische Ebene der menschlichen Psyche hinaus, perinatale und transpersonale Dimensionen des Bewußtseins gibt, die unser Selbstverständnis und unsere generelle Sicht der Welt nachhaltig beeinflussen. Ebenso wichtig ist Grof's Konzept der ‚CoExs' ('systems of condensed experience'), zu Deutsch etwa: ‚Systeme komprimierter Erfahrungskomplexe'. Weiterhin diskutieren wir das Holotrope Atmen, eine Methode zur Induzierung nicht-gewöhnlicher Bewußtseinszustände, die das Wieder-Erleben und die Integration prä- und perinataler Erfahrungsstrukturen ermöglicht, und deren Einfluß auf das Leben der erwachsenen Person erfahrbar machen kann. Die theoretischen und praktisch-erfahrungsorientierten Modelle, die Grof und seine Frau Christina ins Leben gerufen haben, stellen Erklärungswerkzeuge für eine Reihe psychologischer und medizinischer Probleme zur Verfügung. Es scheint, als würden diese Werkzeuge ein weit größeres Erklärungs- und Heilungspotential bergen, als diejenigen Modelle der menschlichen Psyche, die sich auf den biographischen Bereich des Bewußtseins beschränken. Der Artikel endet mit einem kommentierten persönlichen Bericht einer Geburt, sowie einigen allgemeinen Bemerkungen zur Beziehung zwischen Geburtsprozeß, wissenschaftlicher Epistemologie, und dem gegenwärtigen Stand der Evolution unserer Spezies.

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A Personal Introductory Note

I am grateful having the opportunity to contribute this paper. There are two reasons why I feel honored which I'd like to share with the readers of this journal. One is, that Professor Fedor-Freybergh has responded to some critical remarks of mine in an unusually open and welcoming manner (see Vol. 10, no. 1, pp. 56f). This was quite a surprise to me, as I am used to fairly serious reservations in academic and scientific circles, particularly in my country (Germany), when it comes to theories such as Stan Grof's, which are highly innovative and challenging as regards predominant epistemological paradigms. I would therefore like to express my appreciation to Professor Fedor-Freybergh for inviting this paper, and I would also like to mention Dr. Janus, who has been equally supportive concerning the general idea of contributing this survey.

The other reason is the wish to thank my teachers Stan Grof, Tav Sparks, Diane Haug and Kylea Taylor. The latter three are on the teaching staff of the Grof Transpersonal Training, and they have been instrumental in demonstrating what it means to combine theory and practice. All three are international teachers, and Sparks and Taylor have published themselves.

Stan Grof is by some considered to be one of the foremost psychologists of this century. His 40 years of research into non-ordinary states of consciousness have left no doubt as regards the scientific validity of the theories which we are about

to take a look at. What is most impressive, however, is that Stan Grof – in spite of his international reputation and heavily booked schedule – at the age of 68 still takes the time to be with every individual he trains, and that he is a human being who is accessible, and available for personal concerns. I am grateful for what I was able to learn from him over the past years, and I am grateful for seeing a person who deeply walks his talk.

Although I have been working therapeutically with the breath for quite a number of years now, I consider my experience limited. Especially when it comes to the theory and practice of Holotropic Breathwork and Transpersonal Psychology, there are people who would be very well qualified – in many cases much better than myself – to elaborate on Grof's cartography of the human psyche. Therefore, I would like to refer those readers interested in more detail to the references mentioned in this paper. Complete information pertaining to Holotropic Breathwork, such as literature, workshops etc. is available on the webpage of the Association for Holotropic Breathwork International (www.breathwork.com).

I venture to make this contribution here, to introduce the readers of this journal to the basic theories of the perinatal matrices, and to give a survey of key issues relating to the healing potential of non-ordinary states of consciousness. The focus will be on what Stan Grof calls 'Basic perinatal Matrices' (BPM), a theory that, to my knowledge, has not been explicitly laid out in this periodical.

How Did We Get Here? – The Human Psyche and the Birth

The birth process and the stages pertaining to the period from conception to the actual transition to an independent physical existence have over the past decades increasingly come into the focus of attention in several disciplines such as psychology, psychiatry, medicine, consciousness studies, anthropology, indigenous science etc., to name only a few. While there are spiritual traditions such as Buddhism (see Sahlberg 1998), that have in some way or other always incorporated ideas related to prenatal stages (such as in the Zen-Buddhist Koan 'show me your original face before birth'), it is a very young phenomenon in Western culture and science to consider prenatal and perinatal processes important, let alone instrumental to the formation of a person's character structure.

Quite the contrary: It is still hotly debated in some circles whether it is at all possible for the fetal brain to 'record' imprints during pregnancy in general, during its earlier stages in particular, and even during birth itself. In this context two facts which will be well known by the readers of this journal are quite interesting: The pioneering work of Otto Rank, although published as early as 1924, has for several decades gone almost completely unnoticed, and: Rank has been excluded from the Vienna Psychoanalytical Association, in part on grounds of his opinions regarding the impact of birth as related to the formation of neurotic structures.

But, as Leitner (1997), Janus (1997) and many others have demonstrated convincingly, there has been what could well be called a 'revival' of Rank's theories over the last years. Early psychoanalysis formed a base out of which later developments such as 'Ego- and Self-Psychology' emerged as a branch which was, and largely still is, preoccupied with a model of the human psyche that virtually de-

nies any impacts on consciousness which would originate from realms beyond the merely biographical. In other words: Allegedly, it all starts *after* the birth.

As has been demonstrated quite extensively over the past decades, though, there can hardly be any doubt as to the paramount significance of the general circumstances of the fetus' and its mother's life concerning the later development of the child's and adult's personality. It has been discussed on a highly comprehensive level in this journal that prenatal and perinatal phases can have such a deep impact on a person's character formation that virtually her whole life appears to be governed and shaped by the initial imprints acquired before and during birth.

Likewise, the argument that the fetus doesn't have the brain properties to 'record' these imprints, has lately been refuted by physicians, neurophysiologists, obstetricians, consciousness researchers etc. It has become rather obvious – not only by way of these findings, but also through the experiences of thousands of people having undergone Rebirthing, Holotropic Breathwork, and comparable methods of self-exploration – that physical as well as psychological conditions more often than not have important roots in the birth process and the pertinent circumstances.

Another area of research corroborating the above mentioned insights cannot go unmentioned here, although it has become increasingly controversial due to uninformed legislation. I am talking about the use of sacred plants and substances, also called 'entheogens' and 'psychedelics'. This most fascinating field, a comprehensive account of which would require a separate paper, has legally been unduly restricted in most Western countries which, on the one hand, is an understandable reaction on the part of the authorities to the ubiquitous and frequently irreverent use of these agents during the 1960s and 1970s. On the other hand, many of these substances now indexed have been shown to provide invaluable help in coming to grips with circumstances and questions arising in psychiatry, psychopathology, thanatology, oncology, gerontology and many other areas committed to the exploration of the frontiers of consciousness.

One of these areas where entheogens and psychedelics have certainly been – and still are under somewhat covert conditions – of immense help is the 'belated psychological integration' of the birth process. Grof's earlier research has brought forth ample insights into this fact (see Grof 1975, 1980). "The Knowledge of the Womb" by Athanassios Kafkalides (1995), available from the publisher of this journal, is another example of how the semi-synthetic substance LSD can provide access to birth memories and facilitate an integration of the birth-trauma.

Grof has coined a rather intriguing and captious phrase which describes our general situation: He says, that we are all born physically, but many of us are not born emotionally. This predicament calls for an effective alleviation, and Grof's research has demonstrated that non-ordinary states of consciousness (nosc) accessed via ancient and new methods and/or plants and substances have a healing potential which goes far beyond any conventional therapeutic approaches.

Holotropic Breathwork, which we are going to take a closer look at in this paper, is one such technique that facilitates nosc. Thousands of people using this method have reported birth experiences, and they have been able to undergo 'belated processing' of their birth, including re-experiencing the physical as well as emotional hardships and pains, but also the joys and ecstasies of being born.

Let us now take a closer look at the general patterns governing what Grof calls an 'expanded cartography of the human unconscious'.

The Perinatal, Biographical and Transpersonal Strata in Grof's Theory

Basically, Grof differentiates between these three general areas of experience. We will here list these areas, and will then discuss the experiential patterns and states occurring during nosc-work in a separate chapter below. The perinatal ('around the birth') is often used as the general term for what would have to be split up further into the prenatal, the perinatal, and the very early postnatal. To be even more precise, and to be able to comprehensively take into account phenomena reported from non-ordinary state research, we could separate the following single steps in chronological order:

a) Conception and/or – in many cultures and for many individuals – even the time before conception and before the physical act, during which the 'spirit' or 'soul' of the child is 'invited'; see the example reported earlier in this journal, in which a certain indigenous tribe has the woman go out by herself and seek 'the song of the child', that is to be conceived only after she has taught this song to the man she is going to have the child with. Obviously, we could also mention here the somewhat more 'mechanistically' oriented 'planning of children' in Western societies, the impact of which on the course of pregnancy and birth is often overlooked.

b) Pregnancy as such, i.e. the nine months before onset of labor. This stage largely makes up what Grof calls 'Basic Perinatal Matrix 1' (BPM1).

c) BPM2, the onset of labor with the cervix still closed but the uterus markedly contracting and exposing the fetus to a totally different situation as compared to all the months before.

d) BPM3, the opening of the cervix while the contraction of the uterus persists, and the struggle through the birth canal begins.

e) BPM4, the full emergence of the fetus from the womb and the 'transition from a water existing to an air breathing organism' (Grof).

f) BPM4 blending into the early postnatal, involving the cutting of the umbilical cord and the general primary measures taken right after BPM4, which are extremely varying according to the respective culture, religion, medical circumstances etc.

These steps in themselves – without even elaborating on the potential psychological impact they contain – demonstrate in a fairly obvious manner that the idea of the 'birth-trauma' should be quite irrefutable. Even under the best possible circumstances, birth is an enormously painful and threatening ordeal, rendering the fetus subject and victim to physical pressures and forces which are gigantic in relation to its body and psyche, particularly concerning the skull bones.

Additionally, the change and temporary interruption of oxygen supply further aggravates a situation which has been nothing less than life-threatening for all of us. We will go into details below. From the standpoint of Grof's research, Turner & Turner-Groot's position (1998) appears as very surprising (p. 30: 'unless there is a medical crisis the birth itself is not so traumatic'). Followup-studies and

comparison of former clients could probably shed light on the rather remarkable difference between these two perspectives.

I want to make clear that I am not intending to suggest six stages of the birth in the above differentiation. I am simply trying to take a close look at what Grof has presented. For a synoptic division of the four BPMs, an instructive drawing, and related psychological and pathological states see Grof (1975, p. 102f.).

As concerns the differentiation between the general perinatal stages and the psychological material originating from the time after birth, Grof frequently points out that the recognition of the birth being such a major impact on our character structure has revolutionized the psychoanalytic, psychiatric, and psychotherapeutic approaches of the first half of this century. It is indeed a fundamental difference if we limit our search for the root causes of psychological problems or psychopathological symptoms to the biography of a person's life after birth, or if we incorporate the perinatal and the transpersonal realms into our understanding of the human psyche and its cartography. Besides Grof and many others, the psychologist David Lukoff has published quite fascinating material on the positive and healing effects of this amplification, reporting about his therapeutic work with a person who had been diagnosed and 'labeled' schizophrenic (Lukoff 1988, 1996).

The insight into the significance of perinatal imprints takes the roots of psychological problems a step deeper into the human psyche and consciousness. While, for example, classic psychoanalysis would mainly look for Oedipal conflicts when studying sexual difficulties, perinatal theories would include the insight that certain stages of the birth, as will be described below, have powerful sexual connotations which, in some cases, supply explanations of symptoms that cannot be delivered by psychoanalytic approaches.

A further step in amplifying the cartography of human consciousness is the re-discovery and introduction of the transpersonal realm. As its name denotes, the transpersonal generally implies all those areas of experience which seem to lie beyond our usual understanding of who we are. This realm, however, does not consist of psychological material which has been repressed and/or forgotten, and is then reintegrated into the personality. Much rather, transpersonal experiences access those realms of human consciousness which cannot be accommodated by what is often called the Newtonian-Cartesian paradigm, i.e. the linear, causal and mechanistic understanding of the human psyche and nature per se, or by the 'biographical models' of psychology.

Ken Wilber has contributed essential insights concerning the differentiation between genuinely transpersonal states and stages, as opposed to regressive states that appear as, for example, mystical experiences, but are actually signs of deep regression into, and identification with unconscious material. Wilber calls this easily occurring error 'pre/trans-fallacy'. For a concise survey see Walsh (1997); for Wilber's own elaborations, see Wilber (1980, 1995, pp. 205–208, 230–240, 1997, pp. 160–161, 182–183). Furthermore, a well delineated account of genuinely transpersonal states and stages can be found in Walsh (1995).

If we now put the three large experiential realms of consciousness together, we have the perinatal, the biographical, and the transpersonal. Imagining a spatial figure, we could visualize the biographical in the middle or core, the perinatal around this core, and the transpersonal around the perinatal. Consciousness or

awareness could be anywhere in this graph. The more it is concentrated on the inside, the more identified we are with our image of who we think we are. If we move towards the outside, a period of regression and processing would be followed by transpersonal insights. It must be noted, though, that these experiential processes obviously do not obey the laws of linearity and causality, which means that any person can unexpectedly have genuinely transpersonal experiences in between fully regressive processes.

A final concept essential to Grof's theory must be mentioned before we take a closer look at the states and stages typical of the perinatal matrices. This concept establishes the idea of what Grof calls 'CoEx'-systems ('systems of condensed experience'). The CoEx-theory is very fascinating because it partly involves Carl Jung's concept of 'synchronicity' (Jung 1991).

A CoEx is a complex of unintegrated psychological material which subconsciously drives us toward completion. This means, that we will unwillingly create situations in our life which potentially allow for processing of the complex. So far, this seems like nothing else but a general neurotic mechanism. The concept of the CoEx, however, has deeper explanatory roots than the common understanding of neurotic structures in as much as it incorporates the perinatal and the transpersonal dimensions.

The essential amplification of etiology arrived at via the CoEx-theory lies in the idea that there is no such thing as one single root trauma to a conflict. Much rather, there is a 'chain' of events in our chronological past as well as in the perinatal and transpersonal realms – a system of experiences, as it were – which predisposes us to behave in a certain way in specific situations. To demonstrate a classic example, occurring frequently in experiential work using Holotropic Breathwork or psychedelic therapy, we can look at the following symptoms, fed by a CoEx: A person experiences severe shortage of breath and asthmatic bouts in emotionally stressful situations. After years of medical treatment with Cortisone etc., she decides to try experiential psychotherapy, e.g. breathwork. Initially, she is likely to experience all the symptoms as before. However, now they are not suppressed, but they are considered to be an expression of the body's and the psyche's attempt at some sort of completion of the process, and at an integration of the 'information' contained in the symptom.

The person moves on into re-experiencing her symptoms with the help of trained facilitators. Soon she is likely to develop images, emotions, memories etc. related to the symptoms. What has frequently been observed around asthmatic problems is the following CoEx, spanning the biographical, the perinatal and the transpersonal dimension: The person experiences a former life which ends by being hanged. During the birth, she is found to have the umbilical cord around her neck. In later life, a stressful and frightening situation can unleash an amount of fear which is unusually strong because it is driven by the underlying CoEx. When the person then works through the catharsis in the healing process, emotionally and intellectually integrates the material, and accepts the challenges that such an approach presents her usual sense of who she is with, then she is likely to considerably alleviate, or in many cases even heal the severity of her symptoms.

We must be aware here though, that the above example has been given for reasons of demonstrating the concept of the CoEx. It is simplified and cannot be

generalized. Also, we cannot go into the vast field of paradigm discussions, arguing whether such experiences as reincarnation are scientifically valid or not. We can, however, acknowledge that people report such experiences, profit immensely from consciously processing them, often see their symptoms subsequently being healed or improved, when on the other hand they have, sometimes for years, taken medication with quite severe side effects without being able to get well.

The above described concept of the CoEx will be instrumental in our discussion of the perinatal matrices. Particularly when it comes to the understanding of the broader global analogies of the birth, the CoEx-theory appears to be one of the cornerstones of a model for the psyche and human consciousness which provides unprecedented explanatory power regarding such issues as the human drive toward violence and warfare etc. As has been so excellently laid out in this journal, the link between birth and violence can hardly be overemphasized (see, among others, Verny 1997; Ingalls 1997; Hungar 1997; Reinert 1997).

Let us now take a closer look at Grof's perinatal matrices and their specific contribution to the overall understanding of prenatal and perinatal psychology and medicine. We will find that his insights are an invaluable asset to the theories discussed in this journal.

Grof's Theory of the 'Basic Perinatal Matrices'

A large portion of the credit for re-alerting psychology, medicine, and other areas to the paramount significance of the birth goes to Stanislav Grof. To be fair, we must, of course, mention that people like Leonard Orr, Frederic Leboyer and others previously mentioned have also greatly contributed to the general acceptance of birth as a major factor influencing character development. For roughly four decades now, Grof has shown in numerous publications which have been translated into many languages that there are four very distinct stages occurring during the birth process, each of them forming our personality structure in very specific ways. The fundamental outline of the BPMs can be found in Grof (1975, pp. 95–153); for a short survey see Grof (1980, pp. 100f.).

Recently there has been a rather fascinating dispute between Grof and Ken Wilber concerning the exact perinatal steps and their significance. Although we can not go into the birth-related discussion between the two, we should at least mention their dialogue at this point because it is very instructive concerning Grof's basic theory. Wilber has developed a theory of 'fulcrums', resembling stages of the prenatal and perinatal process. He discusses Grof's approach in detail (see Wilber 1995, pp. 584–588, and 1997, pp. 165–185). Additionally, the journal 'ReVision' has carried a three-issue discussion containing portions on birth (see Grof 1996a, 1996b; Wilber 1996). Without denying these views, we will here focus on Grof's theory only.

Each BPM holds a certain spectrum of experiences, depending on the overall situation during pregnancy. This spectrum will cause directly linkable repercussions in later life. We will see that these reflections not only carry individual significance, but also – as hinted at above – lend themselves to suggest quite conspicuous relations to humanity's contemporary condition as such. This is a steep statement, but we will see that it makes much sense. For detailed discussion see

Grof's publications, as well as the work of the European College for the Study of Consciousness (Webpage: www.ecbs.magnet.ch). What, now, is the spectrum of the BPM-experiences? What does living through, and consciously re-experiencing perinatal matrices and the birth entail?

Grof and his wife Christina have inaugurated the 'Grof Transpersonal Training' ('GTT'). The GTT is a therapeutic educational format consisting of theoretical and experiential portions. The latter, called 'Holotropic Breathwork', largely includes a very effective form of using the breath and a particular form of bodywork to facilitate nosc which have been known to help access perinatal, and also transpersonal material. The arising memories of the birth etc. are worked through emotionally, physically and mentally. This highly dynamic affair is supported by several trained facilitators, who not only need the pertinent theoretical and practical knowledge, but also a good portion of ethical awareness (see Taylor 1995). The process helps alleviate a situation which Grof aptly frames as the above mentioned fact that we have all been born physically, but we have not been born emotionally.

Jim Compton-Schmidt of Fresno, California, a longstanding practitioner of Holotropic Breathwork, poignantly describes:

> Christina and Stan Grof, the developers of holotropic breathwork, believe (as do most transpersonal psychology practitioners) that the birth trauma is the most dangerous trauma most of us will encounter until our death . . . the struggle against a closed cervix (for some, for hours), then the struggle down the birth canal where the fetus can become stuck, caught up in the umbilical cord, or the encountering of any number of other life threatening and physically damaging experiences.
>
> Grof projects the possibility that depression (not situational but clinical) might be connected with the almost endless struggle against a closed cervix with continuing massive contractions, temporary loss of blood supply (which is also the loss of air), temporary loss of a way of expelling waste etc. All the hormones that are surging through the mothers system in an attempt to produce the baby are also crossing the placenta and effecting the fetus, producing a hopeless and helpless feeling of being in hell (look at the DSM and see if that fits the description of depression).
>
> When you add the introduction of anesthesia to the mix (most of us over 40 had some form of anesthesia crossing the placenta and affecting the process, if it anesthetized the mother and crossed the placenta, it anesthetized the fetus), Grof sees the possibility that those of us who struggle for a goal and just about reach it, then just simply give up and drift away, may be effected by this interrupted struggle in the birth canal. The same could also be said about c-section delivery. Add to the mix the possibility that the baby is then removed to a nursery and not reconnected to the mother where bonding might take place and you, according to this thinking, have a set up for the first feelings of abandonment and fear of being alone. (Compton-Schmidt, personal communication).

In light of such experiences, it is very obvious that there are a host of possible disturbances in each matrix, which will eventually result in difficulties during later life. These difficulties largely have their roots in a birth-dependent distortion of certain character traits, often leaving transpersonal experiences inaccessible (we cannot go into the special cases of cesarian birth etc. here, but Grof has observed that these persons also have character structures related to the four matrices). How, then, can these distortions be related to the four single matrices?

Effects of the BPMs on Psyche, Self and Consciousness

The description of the effects of the four matrices on character formation will respectively give examples for: 1. The stage of birth, 2. The fetus' ideal condition, 3. The re-experiencing of the ideal condition in nosc, 4. Examples of possible and/or typical disturbances during the respective stage of birth, 5. The re-living and processing of such disturbances in nosc, 6. The general repercussions of the imprinted experiences in later life, 7. Possible psychopathological symptoms, 8. Pertinent analogies to global issues.

The examples can in no way claim to even partially represent the vast variety of phenomena that have been observed in nosc. The mentioned areas of experience are just classic examples, chosen for the sake of demonstration; it is fairly easy to complement the list importing examples from literature, art, even forms of therapy etc. For a comparative synopsis of psychopathological symptoms, corresponding activities in Freudian erogenic zones, associated memories from postnatal life, and NOSC-phenomenology see Grof (1975, pp. 102f.).

BPM 1 is roughly considered to be the time from conception to the phase prior to the onset of labor. Ideally, the fetus is well taken care of in this stage, and the corresponding experience is one of being merged with the 'amniotic universe', a totally safe and provided for symbiosis with the mother's organism. In nosc, this experience is often re-lived in form of mystical states where the Self is united with the All in a blissful transcendence.

If, however, there are disturbances of any nature during BPM 1, these will create an equally profound and obviously problematic imprint on the deep layers of the fetus' Self and consciousness which will later in life play itself out in various forms. One of the most typical and widely spread examples for a disturbance in the 1st matrix would be the mother's excessive consumption of alcohol during pregnancy. The 'amniotic universe' would in this case be severely polluted, sometimes to the extent of threatening the fetus' health or life.

If the child is born, the later grown-up frequently develops an addiction to alcohol. Attempts at treating such cases of alcoholism that are rooted in a problematic 1st matrix often leave the addict moving from one relapse to the next because the deeper causes are not uncovered and healed. Tav Sparks, an experienced transpersonal therapist and international lecturer makes clear: "Practitioners of altered-states techniques are discovering that the path toward wholeness involves not only the healing of biographical issues but also the confrontation with the deeper realms of the psyche, the perinatal and transpersonal dimensions that have to be included in an effective therapeutic process" (Sparks 1987, p. 56). Similar data has been collected by Byron Metcalf (1995) in a study on nosc and recovery from alcoholism.

In nosc such persons experience the threat of being poisoned by polluted water and/or air etc. Another classic example are cases of attempted but unsuccessful abortion, on which much research has been done (see, for example Hidas (1997); Cepicky (1997); Reinert (1997); Blazy (1997). Psychopathologically, the psyche can in this case develop paranoid schizophrenia, general dissociation of reality, and related conditions which reflect the overall insecurity of the person whether her existence is wanted at all. On a global scale, BPM 1 is – needless to say – obviously related to the pollution of air and water, both fundamental resources – 'the

placenta of life', so to say – providing primary prerequisites of human existence and life in general.

BPM 2 is the stage during which labor sets in. The walls of the uterus contract, subjecting the fetus to enormous physical pressures which, if measured and exerted upon the skull or body of a grown person who's skull-structure is considerably harder than the fetus' cranium, would still be sufficient to arouse severe anxiety. Additionally, the cervix is still closed during BPM 2, and so it is quite easy to imagine the imprint on the fetus' experience during this stage. There is 'no way out' in the literal sense, blood vessels are severely constricted and oxygen supply is seriously impeded, so consequently the shortest BPM 2 is 'the best'. Persons who have gone through short second matrices would typically display better capability to endure temporary stretches of physical and/or psychological confinement because they have the deep-seated 'knowledge' that this state will pass. In nosc such persons would ideally wait until this stage is through. However, there is hardly anybody who has reported the 2nd matrix to be positive in any way.

Persons who have experienced a problematic 2nd matrix, such as one of prolonged duration etc. will typically feel extremely threatened in physically and/or psychologically confined situations. Claustrophobia is one of the classic symptoms related to BPM 2, and often those people cannot rid themselves of the initial imprints – and allay the related symptoms in life – unless they consciously re-live and process the pertinent CoEx. Similarly, a problematic 2nd matrix can be responsible for the inability to endure times of stress, and such persons easily collapse when it comes to coping with a dire strait in life. In nosc, the BPM 2 experience is one of being stuck in utter futility, emptiness, meaninglessness, complete contraption etc. Psychopathologically, an unfortunate BPM 2 can, for example, result in suicidal tendencies due to experiencing life as an 'incarceration' (compare the literary work during Existentialism, particularly Kafka and Sartre). The related global perspective is the human compulsion to create confinement in form of nations, borders, proprietary rights, embargoes etc.

BPM 3 is the stage during which the cervix opens. The uteral contractions increase and the struggle through the birth canal begins. It is a struggle for life and against death. Interestingly, cesarian born persons who have been 'deprived' of this struggle, sometimes display precisely that – a lack of ability to struggle – later in life. Under most circumstances, however, the fetus will work its way through the cervix head first, being exposed to 'all kinds of biological material', forming the corresponding imprints on deep layers of the character structure. In nosc, persons with a 'positive' 3rd matrix are 'the winners in a great struggle'.

Disturbances in the 3rd matrix will in one way or other obstruct the fetus' struggle. This can happen via prolonged labor, use of anesthesia, the mother's difficulties to cope with the physical pain of birth etc. Typical 3rd matrix experiences in nosc are cosmic struggles against overpowering forces, demonic battles, and everything reported in the sacred scriptures of the world relating to such images as hell, the 'Armageddon', the cosmic wars in the Upanishads or in Zoroastrism etc.

Persons who have unprocessed problematic imprints from BPM 3 will experience life as a combat zone in which they will 'fight to win' and struggle to 'make it'. Psychopathologically we find all varieties of reflections of the often bloody and

pain-prone processes of BPM 3. It is, for example, easily conceivable that serial killers and ritual murderers are driven by deeply unconscious forces which relate to an extremely problematic 3rd matrix. Globally, the 3rd matrix is, of course, reflected in warfare, the continuous struggle of nations to fight for power and influence, the assertion of resource supplies, the compulsion to create mythologies and religions that are fraught with images of hell, blood, intolerable torture etc. Early on, Grof has laid out the basic thoughts on the relationship between war and its perinatal roots (Grof 1977). Furthermore, the motif of 'spiritual rebirth', essential to most religions, consequently has its deeper significance in the emotional re-living of the birth process and the subsequent enhanced capability to access transpersonal realms.

To give a BPM3-related example of the decisive influence of the underlying model of the psyche regarding the explanation of a phenomenon like violence, I want to comment shortly on a neurophysiological paper in the Journal of Psychoactive Drugs (Amen et al. 1997): This study links violent behavior to hyperactivity or damage of certain areas in the brain, implementing 'single photon emission computed tomography' (SPECT) to collect physical evidence of the afflicted cortical areas. While quite fascinating in its explanatory power, this paper is a good example for the limited scope of classic neurophysiological approaches when it comes to explaining the deeper roots of violent behavior: the causes discussed in the paper are strictly biographical, leading the authors to the following conclusion: "When the organism is healthy it has a high degree of control and usually needs an extreme provocation to elicit violent reactions" (p. 317). This statement clearly does not hold up to quite substantial evidence advanced in prenatal, perinatal and nosc-research. The latter fields have demonstrated that a solely biographical model of the psyche cannot account for the profundity of violent drives. The biographical model is excellent when applied within the confines of its explanatory paradigm, but it must be complemented with an expanded model such as the transpersonal in order to fully penetrate to the root causes of the observed phenomena and produce sufficiently complete explanation.

BPM 4, finally, is the stage we are commonly used to calling 'birth', the moment when the baby begins life as an organism independent of the mother. This includes the cutting of the umbilical cord and the transition from – as Grof frequently emphasizes – a water-organism to an air-breathing organism with all the included physical and psychological alterations. Typical nosc-reflections of BPM 4 are images of breaking free after a long and life-threatening battle, the expansion into freedom etc.

The nature of BPM 4 disturbances is strongly dependent on the respective culture and its ways of dealing with birth. In Western societies birth is often more of an ordeal, exposing the newborn to sterile and cold rooms, physical maltreatment such as claps on the buttocks, painful eye drops, removal from the mother etc., provided the circumstances of birth are 'normal'. If they are not, much more aggravating treatment awaits the child. As opposed to Western means, indigenous peoples have a great variety of birth modes which, in spite of lacking medical knowledge and equipment – or possibly because of that lack – are often much more conducive to the child's wellbeing and welcoming into the world.

Experiences of BPM 4-disturbances in nosc can frequently have the quality of 'being thrown into life' (Heidegger), much in the Existentialist understanding of fatality. The struggle into freedom turns into a life under obscure threats which will suddenly and unexpectedly strike, rendering the subject victim to the larger forces which are impossible to anticipate, let alone control. One of the corresponding psychopathological features is the manic amplitude between depression and megalomania, the sudden shifts from utter despair to becoming the 'world's savior'. The global reflection of the 4rth matrix are the 'despairing' and 'megalomaniac' facets of the 'information age', e.g. the power of economic, political, military and informational control, the conquest of interstellar space, the Internet etc., and their counterparts, the powerlessness and control we have subjected ourselves to by attempting to gain such power.

We could conclude as follows: While each BPM has a 'positive' and a 'negative' side, the key factor regarding the human psyche is that we all carry an individual mixture of imprints from these four matrices, informing our view of the world in ways which are precisely that: individual. It is rather obvious that what we think of as 'our' personality, 'our' psyche or consciousness, or even consciousness per se, is a highly relative affair, provided we take into account the fact that it has been decided early on which experiences will be made part of the 'canon' of our personality, and which will remain in the 'apocryphs' of the deeper layers of the psyche. Transpersonal models, of which Grof's theory is an eminent example, basically serve to establish the significance and the empirical evidence that there is a common ground of experience – and consciousness per se – which lies beyond the individual and which can be accessed when the imprints of the birth matrices are transcended.

Grof considers the belated emotional processing of the birth a quite important ingredient of, and prerequisite for the experience of transpersonal realms. From his model of the psyche it therefore appears advisable to accommodate transpersonal models of the psyche such as his within pre- and perinatal psychology and medicine. One essential factor of the integration of these models is the first-person or experiential nature of such studies. It is quite obvious that such an approach will have enormous consequences for the humanities in general and for psychology and medicine in particular.

A Commented Account of a Birth

Since men are generally more limited in their experiences of birth than women, I have chosen to include into this survey pieces of a personal report of giving birth, in order to demonstrate the possible impacts of certain occurrences during the perinatal process on character formation. The report was given to me for this purpose by the friend who this paper is dedicated to. The birth in question is largely 'normal', but contains several issues that are quite informative from the standpoint of perinatal psychology and medicine, as will be explained in the short comments ('R' designates the portions from the report, 'C' the comments).

From the perspective of perinatal psychology and medicine, I would like to highlight insights which are related to Grof's research and his practical work. The comments, although very critical, are not intended to make statements about

particular persons or institutions, nor are they directed at generally dismissing common practices of child delivery. Their intention is to heighten awareness for possible shortcomings of certain ways of proceeding during delivery, and to suggest changes based on the insights of nosc research.

R: The pregnancy was basically comfortable and uneventful, except for a constant nausea which was always worse in the evening than in the morning. For that I was given the drug Bendectin.

C: Any drug or substance given during pregnancy will influence the 'amniotic universe', and is likely to create deep imprints of uncertainty as to the reliability of life's general resources. The extreme example, which occurs frequently in industrial nations – not in this example here, though – is the mother's ingestion of alcoholic beverages during pregnancy which, at fairly low quantities, will create an imprint of poisoning the amniotic fluid, consequently resulting in the above discussed effects in later life. From the insights of pre- and perinatal psychology and medicine, the administration of drugs and/or substances during pregnancy is a most serious issue, the significance of which – as nosc research shows – is drastically underestimated.

R: Contractions began on November 3rd, 1976. On the afternoon of Thursday the 4rth, the doctor examined me, said I had been having "false" contractions that were not dilating the cervix and that I should go home and relax, eat and take a hot bath and they would go away. I should expect to give birth in a week or so.

C: From this point forward, we should expect the fetus to have entered BPM2. The duration of the second matrix is a salient factor; as regards the above described effects on later character formation.

R: While at the grocery store (on the same day), buying something to cook for dinner, I had my first real contraction. I knew it was one by the difference in the way it felt. We then went to the Beth Israel hospital, one of the best in the area. I was examined, and it was determined that the labor was real – the contractions were three minutes apart and my cervix was 2 centimeters dilated. By about two a.m. they were 7 minutes apart and I had only dilated another centimeter. Within another few hours the contractions were back to 5 minutes apart, but dilation was not continuing at a regular rate.

C: The fact that dilation did not occur at a regular rate implies a prolonged transition from BPM2 to BPM3, subjecting the fetus to an extensive amount of uteral pressures.

R: I was told that the reason why I was experiencing so much back pain was that the baby was "upside down," meaning the back of its head, rather than its face, was against my back. When that happens, labor tends to be longer, there can be more of a strain on the child, and the mother experiences extreme pain as the back of the baby's head presses harder against her spine with each contraction! At some point they reached in and tried to turn him over, but he wouldn't respond to that.

C: The issue of mutual physical pain, invariably inflicted upon each other by mother and child during the birth process is too vast to be commented upon here. As has been found in nosc research, the deep layers of the human psyche carry enormous imprints resulting from these painful experiences. There are religious and ritual connotations related to these imprints, as well as roots for the profundity of the love/hate-ambiguity human beings can

feel in intimate relationships. These and other consequences are amply described in Grof's publications. It is easy to imagine what kind of an imprint could be created by someone reaching into the birth canal and trying to grab or turn the baby.

R: The baby had pretty much stopped moving, which is common during labor, but it scared me because he had been very active up until that point.

C: This is a classical example of what happens to the overall agility of the baby during the perinatal process. Given the physical pressures and other possible impacts from the outside, the unborn child is likely to be thrown into a struggle between fighting for life and giving up again and again. When the baby suddenly stops moving, then it is obvious that not only the mother is scared.

R: It was by then in the vicinity of 4 a.m. and I hadn't slept in nearly 24 hours, and had been in labor for 12. Meanwhile, doctors came and went, examining me and letting me know that the uterus was dilating slowly, staying for a long portion of the night at about 4 centimeters.

C: This is another hint at a prolonged duration of the transition from BPM2 to BPM3.

R: They opened an IV-line, which was standard procedure, but then without asking they began to introduce Demerol into it, which I made them stop.

C: At this point in the perinatal process, any drugs or substances administered will have quite an influence on the baby's ability to cope with the struggle through the birth canal. It is obvious, that sedating or 'numbing' agents given to the mother are likely to impair the baby's power to push forward and to sustain the physical pressures.

R: By the next day at noon, I had been in labor for 20 hours and was about 6 centimeters dilated. I had been examined by three different doctors and 5 medical students (because one of the doctors was teaching a class!).

C: The fact of limited privacy is another issue which is seemingly very different from the above discussed. Concerning the imprints on the deeper layers of the baby's consciousness, however, great fluctuation of persons during the perinatal process are likely to create notions of lacking reliability. It would be interesting to investigate problems involving object relations from the perinatal perspective.

R: The baby was experiencing no distress, but I was exhausted so an epidural anesthetic was recommended. Richie (her husband) and I agreed to that and the needle was inserted in my back and the anesthetic delivered. I accepted, even though I had not planned it that way. Somewhere during that time, they manually broke my water by inserting a hook-like instrument!

C: As mentioned previously, any drug – and certainly an anesthetic – will seriously impair or even debilitate the baby's ability to 'make it through' on its own resources. As has frequently been observed in Holotropic Breathwork, the generation born during the time of regular administration of anesthetics during birth has an extremely high percentage of experiencers feeling that they get stuck in the birth canal, and cannot move out on their own. It often takes quite a number of sessions to work through this feeling of being 'drugged' out of one's own power and to regain control of one's will.

The attempt to break the amniotic water is most likely to create an extremely threatening and aggravating imprint on the psyche, rendering the child and later grown-up subject to fear of sudden unpredictable forces invading her/his life. In my earlier work with the

breath, there has been a person who's mother attempted abortion by inserting a knitting-needle into herself, attempting to break her water. The re-processing of this experience and the accompanying fears that this person had to go through made for a most shocking event. Prior to this work, the person had been diagnosed schizophrenic by mainstream pathological standards.

R: By 2 p.m. I was fully effaced and dilated and taken to the delivery room (actually an operating room, with bright fluorescent lights and a frightening atmosphere) to push the baby out. The container of water was prepared as I had requested (My friend and her husband had planned for a birth according to the principles of Leboyer; M.S.).

C: Much has been said in this journal about the effects of the common circumstances and room arrangements during birth. Neon lights, cold and sterile rooms etc., are conditions that will doubtlessly have deep effects on the experience of arrival in this world (BPM4).

R: Pushing took just over two hours and was more exhausting than I could describe. During that time I was given another dose of Epidural which I did not want but didn't know about until it had been given to me.

C: This administration aggravates the above mentioned influence of drugs on the perinatal process. Furthermore, it is fairly typical of Western medical procedures to override the decision of the delivering mother, turning her into a patient rather than considering birth a sacred event in which the mother should be the one orchestrating everything according to her abilities and decisions, while everyone else in the room should consider themselves servants.

R: For some reason, when we had gone to child birth class, I thought pushing was this easy thing where everything is open wide and you push once or twice and the baby slides out. Little did I know that pushing was a two-hour ordeal where the baby would begin to slide out, only to slide back in at the end of each contraction. First there was two hours of pushing, during which I think I finally figured out why they called it labor!

C: This statement sounds funny in retrospect, but Ms. Frank's remark about the word 'labor' is poignant concerning herself, the child, and any mother.

R: Just before Ron was born, probably minutes before, I was given another dose of Epidural.

C: See above statements on the administration of drugs.

R: It was then determined that I would be given an episiotomy. I hadn't wanted one, but was told that because the baby's head was back-to-my-back, it needed more room to be born.

C: This is obviously a decision we cannot directly criticize. It is interesting, however, that persons not completely having struggled through the birth canal on their own, frequently experience difficulties to cope with the necessity to face struggles in later life. Quite often, nosc work such as Holotropic Breathwork will create such person's desire to now face the birth struggle they have been deprived of when they were born. The same is often true for Cesarian born people.

R: When the baby's head emerged, the umbilical cord was wrapped gently around his neck, so I stopped pushing while the doctor freed it.

C: The umbilical cord being wrapped around the neck is an issue frequently being re-processed in experiential therapies such as Holotropic Breathwork. The salient factor here is the lack of oxygen supply, which – in the first place – is a general factor by way of physical compression in the birth canal, and is then prolonged and exacerbated by the cord around the neck. The fear of suffocation that is quite often re-experienced in nosc, has a host of effects on a person's adult life, as mentioned in section "Effects of the BPMs on Psyche, Self and Consciousness" of this paper.

R: We were separated then, he was taken to the nursery and I to a room.

C: The separation of the newborn from the mother is one of the most critical impacts during BPM4. The severity and emotionally devastating character of such an all too often practiced custom cannot be overemphasized. Having been separated from my mother for 36 hours right after birth, I can say from my personal experience which includes 20 years of self-exploration (Rebirthing, Holotropic Breathwork, Yogic Pranayama, and other methods of deep psychological/therapeutic work) that, among other effects, this separation is one of the essential etiological patterns of a CoEx I have experienced in my intimate relationships with women.

Quite contrary to what is expected of an intellectually raised male person in this society, these patterns of emotional and sexual dependency I have felt subjected to in my life have remained rather overpowering for several years, and totally obscure to me until I entered breathwork. Only by emotionally and physically re-experiencing, and then processing and integrating this neonate separation was I able to slowly detach from the patterns of dependency. Today, at the age of 40, I still would not claim to be absolutely uninfluenced by the deep effects of what I would like to call a 'serious form of covert emotional violence and deprivation', for which no single persons, but certainly medical and psychological theories and philosophies can be held responsible.

R: There was a nurse in there who took a liking to him though, and would sneak him out of the bassinet for bits of time and hold him. I was allowed to bring my breast milk to be fed to him with a bottle, and once a day I think could hold him. Much of the rest of the time I just stood outside the nursery and cried! My body was craving his in a way that is not like anything I've felt before or since, except with him at other times. It's not sexual – it's a deeper need for touch and connection. And all my maternal instincts were kicking in and my hormones were going crazy and I was basically a mental case during that week!!!

C: These last remarks are particularly moving in their openness and sincerity. As Ms. Frank tells us, the emotional and physical deprivation caused by the early separation of mother and newborn is not only devastating for the child. They are equally crippling and overwhelming for the mother. Taking into account the power that the sex-drive can have over us humans, it is quite a statement when Ms. Frank clearly speaks of an even 'deeper need for touch and connection'.

The fact that she started looking at herself as a 'mental case' during that phase only goes to show how little trust in the rightness of our own emotions we have been taught, and how easily we are led into victimizing ourselves in the face of the emotionally and physically deprivating circumstances of childbirth in Western societies. From this broader perspective, it is no surprise that these societies would have specific large-scale problems, such as the ones numerously addressed and traced back to child delivery in this journal, e.g. violence etc. Quite the contrary: It is an unbelievable surprise that under the given

circumstances the human relationship to nature in Western industrial civilizations is not far more disturbed. This fact speaks for the power of nature to sustain herself, not for the environmental awareness of human beings and their industrial endeavors.

The latter thoughts lead us to the final part of this paper, in which I would like to discuss some general aspects of pre- and perinatal psychology and medicine, modern consciousness research and experiential approaches, as well as their overall significance for psychotherapy in particular, and academic and scientific study in general.

Conclusions – Therapeutic and Academic Perspectives

Some parts of the above discussion have been of rather personal nature. This might seem inappropriate to some readers, taking into account that we have a scientific periodical in our hands. However, given the nature of the overall trajectory of this journal, it might be argued that precisely that, personal information and experience, are valid tools and objects of scientific inquiry. Certainly, there are particular problems and questions around data gained from experiential work with nosc, and the reported experiences are sometimes so controversial and seemingly adversarial to common scientific epistemology that some of us might conclude not to accommodate them within the world view we here discuss.

However, a field such as pre- and perinatal psychology and medicine is a provocative one in itself, if we acknowledge the fact that the term 'prenatal psychology' is also a statement. In light of these thoughts, I would like to speak out for the general acceptance of first-person approaches to the study of the human psyche and consciousness, approaches that yield experiences on the frontier of human knowing. Only if we dare to step forward into what Grof has so aptly called 'uncharted territories of human consciousness', can we hope to alleviate and solve the challenges we are presented with at this stage of our evolutionary path.

We doubtlessly stand at a threshold as a species. There is no reason why this threshold shouldn't profoundly affect our understanding of science and nature. As the last decades of Quantum-Physics have demonstrated, we are facing nothing less than a paradigm shift, informing us that everything we thought we could 'objectively' observe from a separate distance is in fact interrelated with our physical and psychological existence, thereby being changed by our observations and in turn changing us just the same. To gain valid knowledge we must, therefore, penetrate into the deeper layers of our psyche in order to discover what we are missing in our search for a more comprehensive understanding of human nature, and nature around us. Particularly if we talk about birth, this penetrating inquiry cannot be solely theoretical. It must include the experiential. And it must do so not only in the therapeutic methods we devise. It must also be included into academic curricula to help build a theory that is grounded on the wholeness of combining solid personal experience with theoretical expertise (see Seelig 1995, 1997, 1998).

Fields such as psychology and medicine have started to learn from these insights. There are increasing and very promising efforts to integrate experiential and holistic methods into therapy and healing services. These efforts are very fortunate developments, as we have to face the fact that we have gone astray and subjected ourselves to ideals which have left us with de-spirited modes of life, left

us with an utter craving for meaning, wholeness and spirituality or, in other words, with the question: What are we born for in the first place?

It is no surprise that experiential modes of self-exploration are so utterly attractive for Western people. These techniques provide first-hand, individual experience and knowing, instead of tradited knowledge. A method such as Holotropic Breathwork, supported by decades of research, is certainly a quite convincing catalyst when it comes to understanding and integrating the early patterns that have formed our character structure. I do not think that it is saying too much, if we state that such methods have the capacity to change our outlook on ourselves and on the world, because they heal strata within ourselves that cannot be accessed via traditional methods of psychology, psychotherapy and medicine. Furthermore, such approaches transcend what has aptly been called the 'disease model' of psychology, a model which is preoccupied with everything that is or can go 'wrong'. Instead, Holotropic Breathwork and other techniques are ultimately grounded on a 'health-model' of the human psyche, much as has been laid out by Stan Grof and Abe Maslow, both founders of transpersonal psychology.

Concerning pre- and perinatal psychology and medicine – and specifically concerning circumstances of child delivery – the above discussed shift would mean creating facilities that acknowledge and honor birth as a sacred event, during which the mother is the high priestess, and all those present at birth are servants. As has been discussed in impressive ways in this journal, such an approach would facilitate a change towards less violence, more tolerance, greater sense of meaning, more joy in life, and a true welcoming of those souls which are yet to be born into this world.

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