

**RESEARCH ARTICLE**

## The Field of Research and Practice in Relation to the Psychological Dimension of Pregnancy and Birth

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In early Psychoanalysis was discovered that preverbal experiences during and before birth are meaningful and can influence later experience in a hidden way. Especially in Humanistic Psychology these observation were elaborated. This paper gives an overview of pre- and perinatal perspectives to different observations practical fields and fields of the humanities. It aims to demonstrate the many fields to which Prenatal Psychology can provide valuable resources. Among them, I would like to emphasize the great practical significance it holds for the field of obstetrics, the health sciences, psychotherapy and the humanities. The challenge of Prenatal Psychology is its trans-disciplinary character. It integrates different levels of quantitative and qualitative levels of observation. So far, research has been mostly conducted by individuals or in the framework of small interdisciplinary groups such as the International Society for Prenatal and Perinatal Psychology and Medicine (ISPPM) in Europe and the Association for Prenatal Psychology and Health (APPPAH) in North America. However, the great theoretical and practical significance requires increased social awareness and action.

**Keywords:** prenatal psychology, perinatal psychology, preverbal experience, trans-disciplinarity, birth, pregnancy.

## Problems of the scientific Situation

In the past few years, **Prenatal Psychology** has emerged as a field of trans-disciplinary research. It offers significant practical and conceptual insights to psychotherapy, psycho-somatics, and obstetrics as well as other health and cultural sciences. As a field of research **Prenatal Psychology** saw its earliest beginnings in the 1920s, while its systematic development began in the 1970s. (Thomas Verny “The Secret Life of the Unborn” 1981, Peter Fedor-Freybergh „Die Begegnung mit dem Ungeborenen (Encounter with the Unborn“ 1987, “Encounter with the Unborn” 1989). Since 1989, the “International Journal of Prenatal and Perinatal Psychology and Medicine“ has been published in Europe alongside the “Journal of Prenatal and Perinatal Psychology and Health“ in Northern America, and regular scientific conferences to facilitate scientific exchange have taken place (see [www.isppm.de](http://www.isppm.de), [www.birthpsychology.com](http://www.birthpsychology.com)).

For the academic sciences with their extensive specialization, it seems difficult to open up to trans-disciplinary approaches that attempt to integrate quantitative and qualitative methods. Science-oriented obstetrics may find it hard to integrate the psychological aspects. And the cultural sciences with their inclination for hermeneutics, as well as psychotherapy, may be at odds with Prenatal Psychology because for the majority of scientific orientated people had the opinion that psychic experiencing and relationship only begins after birth. The time before was seen as biological. As a result of this inadequate reception of evidence regarding pre- and perinatal preverbal experience, basic scientific insights concerning the biographical significance of pregnancy and birth for psyche and health have been ignored or insufficiently considered - both in theory and in practice. However, the empirical basis for the formative significance of pre-, peri- and postnatal experience is reliable: it brings together the methodical level of empirical science (neurology, epidemiology, stress research etc.), qualitative research in the field of practical birth preparation and obstetrics, as well as the experience-based understanding of psychotherapy. An extensive outline of this body of knowledge can be found in the “Handbook of Prenatal and Perinatal Psychology” (Evertz, Janus, Linder 2020).

## Consequences for Praxis

Disregard for (or insufficient consideration of) pre-, peri- and postnatal conditions especially affects the following **medical, therapeutic and preventive practice fields**:

**Early Support:** The significance of prenatal conditions recently is covered by the media in great detail, however, the focus on early support is mainly directed towards conditions after birth and during infancy (see the German Journals: „Spiegel“ October 28th 2017; „Eltern“ September 2017; and the Austrian Journal „Die Furche“ September 21st 2017).

**Birth Preparation:** Established birth preparation focused mainly on the physical and medical aspects of birth. There tended to be a lack of awareness regarding the psychological condition of the parents, and especially of the relationship between the mother and child - nonetheless, these conditions are equally important (Raffai 2020, Schroth 2020a).

**Obstetrics:** Obstetric support and assistance places strong emphasis on the physical and medical aspects of the birthing process. The women’s very own power of giving birth remains at the edge of awareness. In many cases, it is subordinated to medical and financial aspects, resulting, among other things, in the excessive rate of caesarian sections (30%). Generally, there is little awareness of the fact that all medical interventions can have deep psychological impact. The observations of the American prenatal psychologist William Emerson regarding the “consequences of obstetric interventions” might be a helpful source regarding this topic (Emerson 2014, 2020, Janus 2015). This situation is of great practical importance. The renowned professor for women’s health, Beate Schücking (2014), director of the University of Leipzig, ascribes the declining birthrate in Germany partly to the fact that many women experience the medical and technical orientation of clinical obstetrics as traumatizing and therefore decide against having another child. Obstetricians successfully focus on the objective of making birth “safe” in terms of survival, yet, they often remain unaware of the psychological ramifications. Sven Hildebrandt, obstetrician / gynaecologist in Dresden, is one of the few exceptions; in his publications and lectures he promotes “relationship oriented obstetrics”

(2020). Prenatal coach Gunhild Knöbl (2014) collaborates with the women themselves to bring them into their very own power of giving birth. Her work seems of such great practical significance, I initiated a film project to make her knowledge visually accessible (Janus 2019a).

**Neonatology:** In the 1990s, a cooperation between neonatology and prenatal psychology helped to initiate and support a more sensitive approach for the treatment of premature infants, thus leading to a new standard of care (Linderkamp 2020).

**Medical-obstetric Consultation:** In his own practice in Pforzheim, the obstetrician / gynaecologist and psychotherapist, Rupert Linder (2020) developed the concept of “Encouraging Maternity Care”. It may offer an effective model in medical-psychological preparation for birth. Also see: Linder, Janus (2008).

**Fostering Prenatal Mother-Child-Relations:** In their psychotherapeutic work, the Hungarian analysts György Hidas and Jenő Raffai (2005, Blazy 2015, Raffai 2020, Schroth 2020) observed consequences resulting from incriminatory prenatal conditions. Based on these observations, they developed the so called „Bindungsanalyse“ (Bonding Analysis) — a method to support and foster the relationship between mother and child before birth. From the beginning, the mother draws from her very own maternal potential by means of contact with her child during the pregnancy. Individual observations as well as first empirical pilot studies regarding this method of fostering the prenatal mother-child relationship observed the absence of postpartum depression (Schroth 2020b) — otherwise, up to 20% of young mothers may suffer from this condition. An pilot evaluation of 188 attachment analyses showed less need for medical interventions, the children cried less, and there were no occurrences of postnatal depression as can otherwise be observed in up to 20 % of all newborns (Görz-Schroth 2019).

Fostering the mother’s autonomy in the framework of the prenatal mother-child relationship supports her in shaping the obstetric situation to her own needs. Children born thus seem to be more awake and emotionally mature than their peers who did not

receive this prenatal support (see: [www.bindungsanalyse.de](http://www.bindungsanalyse.de), [www.bindungsanalyse.at](http://www.bindungsanalyse.at)).

**Reproductive Medicine:** Biological-technical considerations tend to dominant in this field. Considering its special charges, it would be of special significance to integrate the psychological dimension regarding mother and child, as outlined in the framework of Prenatal Psychology. See: „Der Mutter-Embryo-Dialog. Fruchtbarkeit und Unfruchtbarkeit im Spiegel der Psychotherapie (The Mother-Child-Dialogue. Fertility and Infertility Reflected in Psychotherapy“ by Ute Auhagen-Stephanos (2017, 2020).

**Psychotherapy:** The biographical significance of pre- and perinatal experience was discovered within the framework of psychotherapy (Rank 1924, Janov 1971, Janus 2018d). However, to established psychotherapy, these findings remain of marginal importance. This attitude is a result of the traditional estimation of the scientific orientated people that psychic experience and relationship only begin after birth. Nonetheless, the perspectives of Prenatal Psychology are gaining in importance. See: Ludwig Janus “Enduring Effects of Prenatal Life” (2011), „Die Pränatale Dimension in der Psychotherapie (The Prenatal Dimension in Psychotherapy)“ (2013a), „Der Seelenraum des Ungeborenen (The Psychic Sphere of the Unborn)“ (2012), “Texte zur pränatalen Dimension in der Psychotherapie (Papers to the Prenatal Dimension in Psychotherapy)” (2020d) and, with Helga Levend, „Bindung beginnt vor der Geburt (Bonding Begins before Birth)“ (2011), see also Käppeli 2012, 2013).

**Psychosomatic Medicine:** In psychosomatic medicine, we meet with a somewhat paradoxical situation. On the one hand, it is widely accepted that psycho-somatic disorders and somatization disorders are mainly rooted in traumatic stress during the infancy mother-child relationship (Köhle, Herzog, Joraschky, Kruse, Langewitz 2018). The time before and during birth however, remains beyond awareness. This paradox is probably due to the said traditional estimation that psychic experience and experienced relationship only begins after birth. And yet, the evidence produced by brain research, stress research, epidemiology and other fields of research, as

well as by observations in psychotherapeutic settings, is unequivocal. A book I published, „Die pränatale Dimension in der psychosomatischen Medizin (The Prenatal Dimension in Psychosomatic Medicine)“ presents a number of examples of this evidence (Janus 2013b, see also Verny 2020, Emerson 2013, 2020, Egloff, Djordjevic 2019) Results of epidemiological research as published by Gluckman and Hanson in their books “The Fetal Matrix: Evolution, Development and Disease” (2004) and “Developmental Origins of Health and Disease” (2006) point in the same direction.

**Dissocial Disorders:** Here, too, we have unequivocal evidence that pre-, peri- and postnatal stress, — especially the experience of violence and of being unwanted — are significant in creating a background for later antisocial development. (See the related chapter in “Enduring Effects of Prenatal Life” (Janus 2011, p.130ff., Dytrich, David, Matejcek, Schüller 1988, Raine 1997).

**Psychotic Disorders:** Even here, we can observe unequivocal correlations; however, the availability of systematic research in this field is limited. (See the related chapter in “Enduring Effects of Prenatal Life” Janus 2011, 135ff.).

### **Consequences for the Humanities**

The **humanities** are yet another field for which Prenatal Psychology could provide valuable resources. At different times, different societies have had various ways to care for mothers and children during their first phase of life before, during and after pregnancy (Egloff 2017). These resulted in different psychological conditions for the infants at the beginning of their lives. In each of these societies, this care creates collective psychological meaning and has a formative influence on the mentality. In this context, the history of childhood, especially early and very early childhood, is the most significant field of research. This research happens in the framework of psycho-history. As the American psychoanalyst and psycho-historian Lloyd deMause (1982, 1996, 2002, also see Janus 2013c) defines it, psycho-history inquires after the psychological aspects of historical processes. History of Literature shares this aspect in that it reflects the development of mentalities and biographical correlations (Janus 2018c). It is generally

accepted - not least as a result of the research of Prenatal Psychology - that the conditions of socialization at the beginning of life (especially the time from conception to age of three years) are of crucial significance. Now, it is essential to implement this knowledge in our policies and in the fields of prevention, parental education and pedagogic education (Grille 2005, Janus 2010, Axness 2012, Fuchs 2019, Käppeli 2019).

There is yet another significant aspect: the so called “psychological premature birth” as it was discovered and documented by the Swiss biologist Adolf Portmann (1969, see also Gould 1992). According to his evidence, evolution would require us to be precocial and ripe — like elephants that are born after a gestation period of 21 months. Our upright gait requiring a firm pelvic girdle, along with our brain growth, resulted in human babies being born as “secondary nestlings”, after a shortened gestation period of just nine months. As a result, in about 10% of human births, medical support is required. The fact that we come to this world in a rather unfinished state, and its psychological implications, lead to the consequence that all along, humans have a relation to two different worlds; a real world and an imaginary otherworld (Janus 2018b). This psycho-biological condition provides the backdrop for cultural configurations that paint this otherworld as a magical-animistic universe and mythical world of the gods. At the same time, this “immaturity” was the elementary incentive to redesign the world to increasingly resemble the world of the womb that had been prematurely lost (Janus 2020 a). And considering today’s world of instant gratification, we have come a long way with regard to this desire. It seems to be a significant aspect of mankind’s psychological development that traditional cultures lived by projecting their elementary feelings: as a mythical world of magic interference, or as a world of mythical visions of their own psychic powers. Emotional regulation happened in relation to this otherworld (Janus 2020b). With the Enlightenment and the elementary social changes connected with it, a process evolved that changed the structure of mentality. Emotional regulation turned inwards, as expressed in the literature and art of the 19th and 20th century. (see Obrist 1988, 2006, 2013 and Janus 2013c, 2020c, Evertz 2017, Janus, Kurth, Reiss, Egloff 2015, 2017).

In part, these correlations are still speculative. Over the course of the last few years, they have been researched in the framework of psychohistory, and were presented in the literature mentioned above. Their scientific forum is the “International Journal for Psychohistory” as well as the “[Jahrbücher für psychohistorische Forschung \(Yearbooks of Psychohistoric Research\)](#)”, [Mattes, Heidelberg](#) (see [www.psychohistorie.de](#)). If we include both the prenatal and natal reality of life, we can deepen our understanding of many of the aspects of cultural configurations. Here some examples:

**Music:** Hearing is the sense that particularly bridges both worlds - the pre- and postnatal realms. This may be a reason why music is so fascinating. When the philosopher Peter Sloterdijk asks his question: “Where are we when we listen to music?”, he’s pointing to the particular state of mind we enter when listening to music. The music psychologists Bernd Oberhoff (2008) and Richard Parncutt (2007) have published crucial contributions regarding the prenatal dimension of the experience of music.

**Mythology:** Pre- and perinatal “memories“ have a definitive influence on the content of mythologic tales - and this insight dates back to the beginnings of psychoanalysis. In his book „Der Mythos von der Geburt des Helden (The Myth of the Birth of the Hero)“ (1909) Otto Rank, one of Freud’s students, called the mythological tales of the hero’s birth reflections of perinatal reminiscences. In his book „Das Trauma der Geburt (The Trauma of Birth)“, published in 1924, he further elaborated his ideas. Later authors such as Francis Mott (1960), Francois Dor (2011), Terence Dowling (2011) and others further substantiated these thoughts. Dowling (2001, also see Janus 2013d) used the example of the tree of life that is present in all mythologies to show how this important element of myth can be traced back to the prenatal experience of the placenta.

**Rites of Initiation:** Tribal cultures accompany and support the passage from childhood and youth into adulthood with transitional rites of initiation that involve a symbolic regression into the world of the womb and rebirth. This return to the source was meant to facilitate the transition to the world of adults on a psychic

level. (also see the respective chapter in “Enduring Effects of Prenatal Life”, Janus 2011, p. 167ff.).

**Fairy Tales:** As pointed out by the famous Russian researcher of fairy tales, Vladimir Propp, fairy tales narrate the themes that were staged and enacted in these rites of initiation. Again, they address a symbolic return to the origins of life during the crisis of becoming an adult, a return to the water of life and the tree of life that then, allows for the transition to the world of adults (see the respective chapter in “Enduring Effects of Prenatal Life”, Janus 2011, p. 170ff.).

**Sacred Spaces, Temples and Churches:** In his book “Art and Artist” (1932), Otto Rank pointed out that sacred spaces, temples and churches are designed in a way that facilitates inner contact with prenatal, existential feelings. He illustrates his deliberations with images of early temples that are shaped in actual uterine forms. Klaus Evertz, artist and cultural scientist in Cologne, further elaborated this subject matter (2014).

**Modernist Art:** The question of the unconscious, raised by psychoanalysis, met with strong resonance in the Modernist art of the 20th century. The work of artists such as Salvador Dalí and Paul Klee, reified the fact that this included pre- and perinatal experience. Two books published by Klaus Evertz and myself clarify these interrelations: „Kunstanalyse (Analysis of Art)“ (2003) and „Kunst als kulturelles Bewusstsein vorgeburtlicher und geburtlicher Erfahrungen (Art as Cultural Consciousness of Pre- and Perinatal Experience)“ (2008) (also see Klaus Evertz „Das erste Bild. Pränatale Ästhetik – Schriften zur Kunst. (The First Image. Prenatal Aesthetics). “ 2017).

**The Psychology of Political Processes:** The aforementioned psycho-historian Lloyd deMause (1996) substantiated the fact that the unconscious underpinnings of social change may be determined by the psychodynamics of the experience of birth. See his book: „The Emotional Life of Nations” (2002) as well as many articles in the „Jahrbüchern für psychohistorische Forschung (Yearbooks of Psychohistoric Research)“, [Mattes, Heidelberg](#), see also „Der Wandel der Identitätsstrukturen im Laufe der Geschichte (Changing Structures

of Identity over the Course of History)" edited by Janus, Kurth, Reiss, Egloff 2017).

**Philosophy:** With his book "Spheres" (2011), the philosopher Peter Sloterdijk presented a first draft of a philosophical analysis of the existential dimension of pregnancy that integrates the evidence of Prenatal Psychology. Regarding the process of birth; Artur Boelderl (2007) did the same with his book „Von Geburts wegen – unterwegs zu einer philosophischen Neonatologie (By Birth - Towards a Philosophical Natology)", as well as Christina Schües „Philosophie der Geburt (Philosophy of Birth)" (2012). Yet another aspect, the history of philosophy can be seen as a reflection of the evolution of mentalities and life realities (Janus 2019b).

### **Conclusion**

My delineation shows the relevance of pre- and perinatal perspectives to different practical fields and fields of the humanities. It aims to demonstrate the many fields to which Prenatal Psychology can provide valuable resources.

Among them, I would like to emphasize the great practical significance it holds for the field of obstetrics, the health sciences, psychotherapy and the humanities. That fact that, in general, the sciences are not at all or only very partially aware of these aspects, is not least due to the traditional consensus that psychic experience and relationships only begin after birth. So far, research has been mostly conducted by individuals or in the framework of small interdisciplinary groups such as the International Society for Prenatal and Perinatal Psychology and Medicine (ISPPM) in Europe and the Association for Prenatal Psychology and Health (APPPAH) in North America. However, the great theoretical and practical significance requires increased social awareness and action. In the end, it concerns the inner and practical perception of the elementary female dimension of life — a dimension we have not yet been able to sufficiently appreciate, due to our history being mainly informed by patriarchy. (Gimbutas 1989, Meier-Seethaler 1993, u.a.).

## References

- Auhagen-Stephanos U (2017) Der Mutter-Embryo-Dialog. Fruchtbarkeit und Unfruchtbarkeit im Spiegel der Psychotherapie (The Mother-Child-Dialog. Fertility and Infertility Reflected in Psychotherapy). Psychosozial, Gießen.
- Auhagen-Stephanos U (2020) Mother-Embryo-Dialog (M-E-D). In: Evertz K, Janus L, Linder R (Eds.) Handbook of Prenatal Psychology. Springer, New York. Chapter 13.
- Axness M (2012) Parenting for Peace. Sentient Pbl., Boulder, CO, USA.
- Blazy H (Hg.) (2015) Jenö Raffai „Gesammelte Aufsätze“ (Collected Essays). Mattes, Heidelberg.
- Boelderl A (2007) Von Geburts wegen – unterwegs zu einer philosophischen Natologie (By Birth - Towards a Philosophical Natology). Königshausen und Neumann, Würzburg.
- deMause L (1982) Foundations of Psychohistory. Creative Roots, New York.
- deMause L (1996) Restaging fetal traumas in war and social violence. In International Journal of Prenatal and Perinatal Psychology and Medicine 8: 171–212 (Free Download at [www.Ludwig-Janus.de](http://www.Ludwig-Janus.de)).
- deMause L (2002) The Emotional Life of Nations. Karnac, New York, London.
- Dowling T, Leineweber D (2001) Ein Urbild des Lebensbaums (The Archetype of the Tree of Life). Deutsche Hebammenzeitschrift 12: 17–20.
- Dytrich Z, David H P, Matejcek Z, Schüller Z.(1988) Born Unwanted. Springer, New York.
- Egloff G (2017) Child-Rearing. Practices, Attitudes and Cultural Differences. Nova Science, New York.
- Egloff G, Djordjevic D (eds.) (2019) Pre- and Postnatal Psychology and Medicine. Nova Science, New York.
- Emerson W (1996) Treating Birth Trauma in Infants and Children. Emerson Training Seminars, 4940 Bedega Ave., Petaluma, CA 94592.
- Emerson W (2013) Folgen geburtshilflicher Eingriffe (Consequences of Obstetric Interventions). In: Janus L (Hg.) Die pränatale Dimension in der Psychotherapie (The Prenatal Dimensions of Psychotherapy). Mattes, Heidelberg.
- Emerson W (2020) Geburtstrauma (Birth Trauma). Mattes Heidelberg.
- Evertz K, Janus L (Hg.) (2003) Kunstanalyse (Art Analysis). Heidelberg, Mattes.
- Evertz K (2014) Die pränatale Dimension: Bilder in Kunst und Therapie (The Prenatal Dimension: Images in Art and Therapy). In: Meyer-Schubert A (Hg.) Mein erstes Universum. (My first Universe) Be. & Be., Heiligenkreuz im Waldviertel.
- Evertz K (2017) Das erste Bild. Pränatale Ästhetik (The First Image. Prenatal Aesthetics). Schriften zur Kunst 1998-2015. Mattes, Heidelberg.
- Evertz K, Janus L, Linder R (Hg.) (2014) Lehrbuch der Pränatalen Psychologie (Textbook of prenatal Psychology). Mattes, Heidelberg.
- Evertz K, Janus L, Linder R (Eds.) (2020) Handbook of Prenatal Psychology. Springer, New York.
- Fedor-Freybergh P (Hg.) (1987) Die Begegnung mit dem Ungeborenen (Encounter with the Unborn). Mattes, Heidelberg.
- Fedor-Freybergh P Vogel V (Eds.) (1989) Encounter with the Unborn Parthenon, Casterton Hall, Carnforth.
- Fedor-Freybergh P (2015) Das pränatale Kind: Kontinuität und Dialog (The Prenatal Child: Continuity and Dialog). In: Meyer-Schubert A (Hg.) Mein erstes Universum (My first Universe). Be. & Be., Heiligenkreuz im Waldviertel.
- Ferency S (1913) Entwicklungsstufen des Wirklichkeitssinnes (The Developmental Stages of a Sense of Reality). In: S. Ferenczi. Bausteine der Psychoanalyse Bd. I. Huber, Bern 1964.

- Fuchs S (2019) Kindheit ist politisch (Childhood - A political Matter). Mattes, Heidelberg.
- Gimbutas M (1989) The Language of the Goddess. Unearthing the Hidden Symbols of Western Civilization. Harper Collins, New York.
- Gluckman P, Hanson M (Ed.) (2004) The Fetal Matrix: Evolution, Development and Disease. Cambridge University Press, New York.
- Gluckman P, Hanson M (Ed.) (2006). Developmental origins of health and disease. Cambridge University Press, New York.
- Görz-Schroth A (2019) Quantifizierung von häufigen Erfahrungen mit der Bindungsanalyse. Der Erfahrungsschatz der Bindungsanalyse in Zahlen (Quantifications of common Experiences in Attachment Analysis - The Insights of Attachment Analysis in Numbers). In: Blazy H (Hg.) Polyphone Strömungen” Darstellung neuer Erfahrungen aus der Bindungsanalyse (Polyphonous Dynamics - New Insights of Bonding Analysis). Mattes, Heidelberg. S. 7-17.
- Gould S (1992) Human Babies as Embryos. In: Gould S “Ever since Darwin”. Norton, New York
- Grille R (2005) Parenting for a peaceful world. Longueville Media, Alexandria, Australia.
- Hidas G, Raffai J (2005) Die Nabelschnur der Seele (The Soul’s Umbilical Chord). Psychosozial Gießen.
- Hildebrandt S (2012) Vision einer neuen Geburtskultur (Visions of a New Birth Culture). Hebamme, 25(2): 109–114.
- Hildebrandt S (2013) Die Psychosomatik von Schwangerschaft und Geburt aus Sicht der pränatalen Psychologie (The Psychosomatics of Pregnancy and Birth from the Perspective of Prenatal Psychology). In: Janus L (Hg.) Die pränatale Dimension in der psychosomatischen Medizin (The Prenatal Dimension in Psychosomatic Medicine). Psychosozial 36(4): 84–88.
- Hildebrandt S (2020) Attachment Guided Birth Culture as a Means to Avoid Pre- and Perinatal Health Disorders. In: Evertz K, Janus L, Linder R (Eds.) Handbook of Prenatal Psychology. Springer, New York. Chapter 12.
- Janov A (1971) The Primal Scream. Dell Publishing, New York 1971.
- Janus L (2010) Über Grundlagen und Notwendigkeit der Förderung der Elternkompetenz (Principles and Imperative of Promoting Parenting Competence). In Völmicke E, Brudermüller G (Hg.) Familie – ein öffentliches Gut (Family - A Public Good) (S. 207–218). Königshausen und Neumann, Würzburg.
- Janus L (2011) Enduring Effects of Prenatal Life. Download von [www.Ludwig-Janus.de](http://www.Ludwig-Janus.de).
- Janus L (2012) Der Seelenraum des Ungeborenen – Pränatale Psychologie und Therapie (The Psychic Sphere of the Unborn - Prenatal Psychology and Therapy). Schwabe, Ostfildern.
- Janus L (Hg.) (2013a) Die pränatale Dimension in der Psychotherapie (The Prenatal Dimension in Psychotherapy). Mattes, Heidelberg.
- Janus L (Hg.) (2013b) Die pränatale Dimension in der psychosomatischen Medizin (The Prenatal Dimension in Psychosomatic Medicine). Psychosozial, Gießen
- Janus, L. (Hg.) (2013c). Die Psychologie der Mentalitätsentwicklung (Psychology of the Development of Mentality). LIT, Münster.
- Janus L (2013d). Die vorgeburtliche Bedeutung der Plazenta aus pränatalpsychologischer Sicht (The Prenatal Significance of the Placenta from the Perspective of Prenatal Psychology). Hebammenzeitschrift 5/ 2013: 60-64.
- Janus L (2015) Geburt (Birth). Psychosozial, Gießen.
- Janus L (2018a) Die lebensgeschichtliche Bedeutung von Schwangerschaft und Geburt (The Biographical Significance of Pregnancy and Birth). In: Brock I (Hg.) Wie die Geburtserfahrung unser Leben prägt (How the Birth Experience Impacts our Lives). Psychosozial, Gießen.

Janus L (2018b) *Homo foetalis et sapiens – Das Wechselspiel des fötalen Erlebens mit den Primateninstinkten und dem Verstand als Wesenskern des Menschen (Homo foetalis et sapiens - Fetal Experiencing in its Interplay with Primal Instincts and the Mind: the Essence of Human Existence)*. Mattes, Heidelberg.

Janus L (2018c) *Die Widerspiegelung der Mentalitäten und Lebensbezüge im Spiegel der Literatur (Reflections of Mentalities and Life Relations in the Mirror of Literature)*. In: Janus L „Homo foetalis et sapiens – Das Wechselspiel des fötalen Erlebens mit den Primateninstinkten und dem Verstand als Wesenskern des Menschen (Homo foetalis et sapiens - Fetal Experiencing in its Interplay with Primal Instincts and the Mind: the Essence of Human Existence)“. Mattes, Heidelberg.

Janus L (2018d) *Prenatal Psychology opens up a new horizon for the human concept*. In: Turner J, Turner T, Gouni O (eds.) *Prenatal Psychology – 100 Years*. International Journal of Prenatal & Life Sciences, Athens, p. 9-34.

Janus L (2019a) *Film: Lebendige Geburt. Geburtvorbereitung im Wasser (Lively Birth. Birth Preparation in Water)*. EAZ Film, Keplerstr. 14 d, D – 22756 Hamburg.

Janus L (2019b) *Vom Kosmos zu Erde – Die Geschichte der Philosophie zur als Widerspiegelung der Evolution der Mentalitäten und Lebensbezüge (Cosmos and Earth - The History of Philosophy reflecting the Evolution of Mentalities and Life Relations)*. Mattes, Heidelberg.

Janus L (2020a) *Die fötale Dimension in den menschlichen Gesellschaften (The Fetal Dimension in Human Societies)*. In Janus: *Die psychologischen Aspekte der Erkenntnistheorie und der Ontologie (The Psychological Aspects of Epistemology and Ontology)*. Mattes, Heidelberg. p. 11-66.

Janus L (2020b) *Die Psychodynamik der Projektiven Gefühlsregulation (The Psychodynamic of the Projective Regulation of Emotions)*. In Janus L: *Die psychologischen Aspekte der Erkenntnistheorie und der Ontologie (The Psychological Aspects of Epistemology and Ontology)*. Mattes, Heidelberg. p. 95-114.

Janus L (2020c) *Die psychologischen Aspekte der Erkenntnistheorie und der Ontologie (The Psychological Aspects of Epistemology and Ontology)*. Mattes, Heidelberg.

Janus L, Evertz K (Hg.) (2008) *Kunst als kulturelles Bewusstsein vorgeburtlicher und geburtlicher Erfahrungen (Art as Cultural Consciousness of Pre- and Perinatal Experience)*. Mattes, Heidelberg.

Janus L (2020d) *Texte zur pränatalen Dimension in der Psychotherapie (Papers to the Prenatal Dimension in Psychotherapy)*. Mattes, Heidelberg.

Janus L, Kurth W, Reiss H, Egloff G (Hg.) (2015) *Verantwortung für unsere Gefühle. Die emotionale Dimension der Aufklärung (We are Responsible for our Feelings. The emotional Dimension of Enlightenment)*. Mattes, Heidelberg.

Janus L, Kurth W, Reiss H, Egloff G (Hg.) (2017) *Der Wandel der Identitätsstrukturen im Laufe der Geschichte (Changing Structures of Identity over the Course of History)*. Mattes, Heidelberg.

Käppeli K (2012) *Die Kaiserschnittgeburt im Erleben des Kindes (The Child's Experience of Cesarean Birth)*. In: Hildebrandt S, Schacht J, Blazy H (Hg.) *Wurzeln des Lebens – Die Pränatale Psychologie im Kontext von Wissenschaft, Heilkunde, Geburtshilfe und Seelsorge (Roots of Life - Prenatal Psychology in the Context of Science, Therapeutics, Obstetrics and Counseling)*. Mattes, Heidelberg.

Käppeli K (2013) *Erfahrungen aus der therapeutischen Praxis mit Kindern und Jugendlichen (Therapeutic Praxis with Children and Adolescents)*. In: Janus L (Hg.) *Die pränatale Dimension in der Psychotherapie (The prenatal Dimension of Psychotherapy)*. Mattes, Heidelberg.

Käppeli K (2019) *Die Schule – Geburts- und Lebensraum des Kindes (School - The Child's Habitat of Birth and Life)*. Mattes, Heidelberg.

Knöbl G (2014) *Geburtscoaching - Geburtsbonding / „Das Kind bringt sich mit Hilfe der Mutter zur Welt“ (Birth Coaching - Birth Bonding / The Child births itself with the*

aid of its Mother). Mattes, Heidelberg (s. auch DHZ 11/ 2014)

Köhle L, Herzog W, Joraschky P, Kruse J, Langewitz W (Eds.) (2018) Psychosomatische Medizin (Psychosomatic Medicine). Urban & Fischer in Elsevier, Amsterdam.

Levend H, Janus L (Hg.) (2011) Bindung beginnt vor der Geburt (Bonding Begins before Birth). Mattes, Heidelberg.

Linder R, Janus L (2008) Psychologische und Psychosomatische Aspekte von Schwangerschaft und Geburt (Psychologic and Psychosomatic Aspects of Pregnancy and Birth). In: Wollmann-Wohlleben V, Nagel-Brotzler A, Kentenich H, Siedentopf F (Hg.) Psychosomatisches Kompendium der Frauenheilkunde und Geburtshilfe (Psychosomatic Compendium of Gynaecology and Obstetrics). Hans Marseille, München.

Linder R (2020) Improving Pregnancy Outcomes: Effects of an Integrated Linkage of Obstetrics and Psychotherapy. In : Evertz K, Janus L, Linder R (Eds.) Handbook of Prenatal Psychology. Springer, New York. Chapter 16.

Linderkamp O (2020) Relating to the Preterm Child. In : Evertz K, Janus L, Linder R (Eds.) Handbook of Prenatal Psychology. Springer, New York. Chapter 24.

Meier-Seethaler C (1993) Von der göttlichen Löwin zum Wahrzeichen männlicher Macht. Ursprung und Wandel großer Symbole (From the Divine Lioness to the Insignia of Masculine Power. Origins and Alterations of Significant Symbols). Kreuz, Stuttgart.

Mott F (1960) The mythology of prenatal life. The Integration Publishing Company, London.

Oberhoff B (2008) Das Fötale in der Musik. Musik als „Das Große Bewegende“ und „Die Göttliche Stimme“ (The Fetus in Music. Music as “The Great Arouser” and “The Voice of God”). In: Janus L, Evertz K (Hg.) Kunst als kulturelles Bewusstsein vorgeburtlicher und geburtlicher Erfahrungen (Art as cultural consciousness - Prenatal and Birthing experiences). Mattes, Heidelberg.

Obrist W.(1988) Die Mutation des Bewusstseins (The Mutation of Consciousness). Lang, Frankfurt.

Obrist W (2006) The Mutation of European Consciousness. Karnac, London.

Obrist W (2013) Der Wandel des Welt- und Menschenbildes im Verlaufe der Neuzeit, unter dem Blickwinkel der Bewusstseins-Evolution betrachtet (The Transformation of the world view and image of humanity in the course of the modern era, as seen from the point of view of the evolution of Consciousness). In L. Janus (Hg.) Die Psychologie der Mentalitätsentwicklung – vom archaischen zum modernen Bewusstsein (The Psychology of the development of mentality - from the archaic to the modern Consciousness, S. 11–24). LIT, Münster.

Parncutt R, Kessler A (2007) Musik als virtuelle Person (Music as a virtual person). In Oberhoff B, Leikert S(Hg.) Die Psyche im Spiegel der Musik Psychosozial (The Psyche through the mirror of Music), Gießen. S. 88–112.

Portmann A (1969) Biologische Fragmente zu einer Lehre vom Menschen (Biological Fragments towards a teaching in Humanics). Schwabe, Basel.

Raffai J (2020) The Impact of Parental Conflict on the Intrauterine Realm. In: Evertz K, Janus L, Linder R (Eds.) Handbook of Prenatal Psychology. Springer, New York. Chapter 40.

Raine A (1997) Criminal Behaviour as Social Disorder. Elsevier, Oxford.

Rank O (1909) Der Mythos von der Geburt des Helden. Versuch einer psychologischen Mythendeutung. Leipzig, Deuticke, Wien 1922. (The Myth of the Birth of the Hero. Johns Hopkins, 2004)

Rank O (1924)Trauma of Birth. Dover, New York 1993.

Rank O (1932) Art and Artist. Knopf, New York.

Schroth G (2015) Peri-/Postpartale Depression (Peri-/Postnatal Depression). In: Deutsche Psychotherapeuten Vereinigung (Hg.) Psychotherapie Aktuell, 2/2015, 10-16

Schroth G (2020a) Introduction to Prenatal Bonding (BA)\*. In: Evertz K, Janus L, Linder R (Eds.) Handbook of Prenatal Psychology. Springer, New York. Chapter 39.

Schroth G (2020b) Postpartum Mood Disorders: Prevention by Prenatal Bonding (BA). In:

Evertz K, Janus L, Linder R (Eds.) Handbook of Prenatal Psychology. Springer, New York. Chapter 41.

Schücking B (2014) Die sozialpolitische und kulturelle Bedeutung der Kaiserschnittgeburt (The socio-political and cultural meaning of Cesarean birth). In: Hildebrandt, u.a. (Hg.) Kaiserschnitt – zwischen Traum und Trauma, Wunsch und Wirklichkeit (Cesarean Section - between Dream and Trauma, Wish and Reality). Mattes, Heidelberg.

Schües C (2012) Philosophie der Geburt (Philosophy of Birth). In: Hildebrandt S, Schacht J, Blazy H (Hg.) Wurzeln des Lebens.

Die Pränatale Psychologie im Kontext von Wissenschaft, Heilkunde, Geburtshilfe und Seelsorge (Roots of life – Prenatal Psychology in the Scientific, Therapeutic, Obstetric and Counseling Context). Mattes, Heidelberg.

Sloterdijk P (2011) Spheres. MIT Press, Cambridge, Massachusetts.

Verny T (1981) The Secret Life of the Unborn Child. Dell, New York.

Verny T, Weintraub P (2002). Tomorrow's Baby. Simon & Schuster, New York.

Verny T (2020) The Pre- and Perinatal Origins of Childhood and Adult Diseases and Personality Disorders. In: Evertz K, Janus L, Linder R (Eds.) Handbook of Prenatal Psychology. Springer, New York. Chapter 5.