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# The Rubicon as a developmental phenomenon in middle childhood<sup>1</sup>

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In public discussions of Waldorf education certain notions are regularly bandied about supposedly as ways of explaining it. Thus not a few people nowadays will be well versed in certain key explanatory tags, such as "eurythmy", "block teaching" or "education without exams". And undoubtedly among these is a more or less diffuse idea of the "Rubicon" as a crisis occurring before puberty. As such it will be found under discussion in parent forums on the internet (e.g. Blass 2013).

This article begins by setting this concept in its historical context and then attempts to substantiate it as a consequence of anthroposophical thinking on development, as set out by Rudolf Steiner from 1907 on. The intention in doing so is to bring to light the chief features of this major childhood transition, as they were viewed by the founder of anthroposophy. We will then venture into the realm of current socialisation theory with a view to giving firm contours to Steiner's injunctions on how to teach eight to eleven-year-old children. Finally we will set the Rubicon concept in its place within the body of current thinking in developmental psychology on the theme of middle childhood.

### The history of the "Rubicon" concept

In olden times the *Rubicone* was a river that marked the border between the Italian heartland and the Roman Province of Cisalpine Gaul. In 49 B.C. Julius Caesar crossed the Rubicone with his army, against the wishes of the Roman senate. This act was effectively a declaration of war on the senate, from which there could be no retreating – which Caesar acknowledged with the famous phrase "alea iacta est" ("The die is cast"). Since then the expression "to cross the Rubicon" has established itself as a metaphor for an irreversible action or event that may bring with it great changes and a high degree of risk. In science this concept has twice been pressed into prominent service: in the account of human development put forward by Rudolf Steiner from 1919 onward, and in Heckhausen and Gollwitzer's psychological theory of action (1987).

The Rubicon model of the phases of action seeks to give an account of the mental factors involved in transforming a decision, once taken, into its realisation in action. The first (pre-decisional) phase is characterised by a weighing up of risks. Once the subject has committed to going for a particular goal, however, the risk-assessment phase cannot be protracted indefinitely, and its subsequent curtailment is what leads, then, to the realisation of the action, with whatever unforeseen risks that might accompany it (Achziger & Gollwitzer 2009, p.151).

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Steiner also uses the concept "Rubicon" for the potential its historical associations offer for constructing a metaphorical framework that can be applied to the developmental event in question. In the middle phase of childhood<sup>2</sup>, around the ninth or tenth year, there is, according to him, a turning point which leads to a deepened sense of self. Once children have gone through this tense phase there is – pictorially speaking – no going back whence they came: to that infant mentality of imitative identification with the adult world. In the structure of their consciousness they have, like Caesar, reached a *point of no return*, from which the path leads in one direction – that of further, sequential stages in the development of individual identity.

In addition to this, the Rubicon can be construed as a reprise of an earlier phase known as "the terrible twos" - a term that made its debut in the early empirical stages of developmental psychology at the beginning of the 20th century. In his book "Erziehung zur Anthroposophie", Klaus Prange maintains that Steiner appropriated this concept and "passed it off as an integral part of anthroposophy" (Prange 1985, p.109). Helmut Zander, quoting Prange as his source, repeats this charge (Zander 2007, vol II, p.1405). Neither of these authors, however, provide any proof of this claim. Consequently, we feel the following remarks are in order.

There is clear evidence that from the 1880's into the first decade of the 20th century Steiner took a keen interest in the new science of psychology that was then taking shape, as well as absorbing much of its literature. This can be seen from his own published work. Already in "A Theory of Knowledge Implicit in Goethe's Worldview" he sketches the efforts being made on all sides to grasp the workings of the human mind in empirical terms and to explain them systematically. Through all this, according to Steiner, psychology consistently failed to develop a unified concept of mental life. Moreover, the distinction between the "psychic"<sup>3</sup> and the noetic aspects of mental function could no longer be maintained, which meant that appreciation of human identity as inherently involving selfhood was being eroded. With the rise of Darwinism, then, development was increasingly regarded purely in terms of evolutionary biology. Within this general context Steiner followed up the publications of particular psychologists, such as Wilhelm Preyer (1841-1897), who, although he espoused the Darwinian theory, nonetheless vehemently rejected some of its materialistic consequences. Preyer stood firm in his conviction that the soul could not be accounted for as an epiphenomenon of purely biological processes. His systematic observations of children in early infancy led him to postulate that in phylogeny reason generates language, and that consequently in human ontogeny the new-born "comes into the world much more endowed with understanding than with talent for language" (Preyer cit. by Eckardt 1989, p.37). Preyer maintained that reason is an innate formative power which, in interaction with its bodily basis and with the environment, precipitates out into particular abilities. (Preyer 1989, p.271; Eckardt 1989, p.37). In his obituary on Preyer Steiner praised this approach as a significant contribution to psychology (Steiner 1989, p.346ff.). Preyer's book "Die Seele des Kindes" ("The Soul of the Child"), first published in 1882, is still regarded as the founding work of empirical child psychology.

After the turn of the century, then, Steiner, in his essay "Moderne Seelenforschung" ("Modern Explorations of the Soul", Steiner 1989), attempts to outline some of the main currents in empirical psychology. Included, of course, is the field of experimental psychology and its main representative in Germany – Wilhelm Wundt. Here Steiner makes a comment in passing that shows just how keenly aware he was of the widespread reputation of this new science, which had its home in the institute in Leipzig founded by Wundt:

"From all parts of the civilised world students found their way to Leipzig to learn the new methods under Wundt's guidance. And these modern methods of psychological investigation they have disseminated far and wide. In Copenhagen and Jassy, in Italy and America experimental psychology is taught in the spirit of Leipzig" (Steiner 1989, p.468).

<sup>2.</sup> Middle childhood – also known, in the English-speaking world, as "juvenility" – is a phase of development which is attracting an increasing amount of research. The so-called latency period – well known in psychoanalytic literature – by which is meant a lull in psycho-sexual development between the ages of 6 and 12, is now viewed in a more complex way. In "mid-childhood" there arise challenges of both an intrinsic and extrinsic nature, which are highly significant for the development of the child's personality. The temporal boundaries for mid-childhood, however, are by no means fixed. They fluctuate between ages 6 and 8 (beginning) and 11 and 12 (end, beginning of pre-puberty). Cf. Ahrend 2002, p. 17.

<sup>3.</sup> Translator's note: Symptomatic of Steiner's contention here is the fact that the English language no longer has normal terms for such distinctions.

Among these students was the American psychologist and educational theorist Granville Stanley Hall (1844-1924). Hall spent four years of study and research in Wundt's laboratory, and after his return to the USA sought to apply the fruits of this work. Thus he set about developing a method suitable for collecting large samples of data based on psychological observation and processing them systematically. With the invention of the questionnaire he succeeded in this aim. Hall is rightly regarded as the founder of the survey by questionnaire (Kreppner 1998, p.130). With this newly created instrument he carried out the first major investigation of aspects of child development. His studies mainly analysed the steps the child takes on the way to the development of selfhood. The richly detailed descriptions of phenomena were then systematically processed and typologically grouped, and gradually from this emerged a phase-based model of child development.

Hall's theory distinguished four phases (Cizek et al. 2005, p.8), taking the child from infancy to the autonomy of the young adult. They are: infancy (0 - 4), childhood (4 - 8), youth (8 - 12), and adolescence (11/13 - 22/25). The phases of youth and adolescence are periods involving major changes which are apt to make their presence felt in considerable inner tensions. In addition, Hall had come to see that within the span of this developmental process each individual unconsciously repeats significant chapters of human history. This conception was already well known as the "biogenetic recapitulation theory" (Cizek et al., op. cit.), a spiritual version of which was put forward by Steiner.

Hall's investigations were very influential, and in their turn stimulated empirical psychology in Germany. This came through the translation and publication, in 1903, of his book "Some aspects of the early sense of self", which had appeared in the USA in 1898.

It was the work of Oswald Kroh (1887-1955) that secured such an excellent reception for Hall's book. As a psychologist, he was eager to discover fruitful ways of applying the new findings in education. In this his particular concern was with the phases of development, and how teaching methodology could profit from knowledge of them. It was also Kroh who sought to pinpoint the decisive moment in the recapitulation postulated by Hall: the first stirring of the sense of self in the two to three-year-old child is marked, on the one hand, by the child's first referring to himself as "I' and, on the other, with the "stubborn phase" associated with the child's first distancing of himself from his surroundings. According to Kroh this event recurs in changed form at the transition from the second to the third phase of school-age (Kroh 1928, p.93ff.). While the seven-year-old, newly admitted to school, expresses *in the first phase* a realism coloured by fantasy and a ready facility for analogy, and by the age of 10 - the second phase – arrives at a more fully conscious attitude (naïve realism), the *third phase* is characterised by the development of a critical attitude, combined with all the signs of a second "stubborn period". Kroh designates this point in development with the term "immature critical realism" (Kroh 1928, p.100; Bergius 1959, p.138; Trautner 1997, p.34). At the same time, in the course of this second stubborn period, the 10 to 12-year-old child – the exact age depends on the individual – "turns inward" (Bergius 1959, p.138).

Thus by the beginning of the 20<sup>th</sup> century developmental psychology had already produced a detailed phase model firmly based upon empirical evidence and not, as was traditionally the case, upon idealised descriptions of fixed steps. Now the talk is of subtle moments of incipient detachment, happening before the onset of puberty, that can be described as transitional phenomena. Repeatedly Kroh singles out the age of ten for special mention: "Hand in hand with this age-group's critical attitude, which does not flinch even in the face of what a teacher may do or say in class, goes the fact that the ten-year-old increasingly turns away from what is immediately before him, paying more attention to the relationships behind the given phenomena. Yes, it can be said that now it is not so much things themselves, but the relations between them that have his interest" (Kroh 1928, p.100). And on the same page: "Aware of his own worth, the ten to twelve-year-old shows a well-developed ability to assess not only where he and his peers are placed in the scale of values, but also the assumed or actual shortcomings of adults" (Kroh op. cit.).

The concept of the "second stubborn phase" must be seen as belonging together with the history of the "Rubicon" concept. Here there is indeed a factual and structural connection. In the matter of the second stubborn phase, however, the scientific literature assigns sole authorship to Kroh (see Oerter & Montada

2008, Cizek et al. 2005, Steinebach 2000, Trautner 1997, Bergius 1959). Kroh's scientific career began in 1926 with his first publication, "The Phases of Development in Middle Childhood" (Kroh 1926). At this early point in his career he already had the intention of applying the phase model for the benefit of education. The first major monograph on the subject – "Psychologie des Grundschulalters" ("The Psychology of Children of Primary-school Age" – the work cited here) – did not appear until 1928. Steiner, who died in 1925, cannot have had the chance to absorb the content of this newly-formed psychological theory, the beginnings of which he probably knew about through Hall. Thus, contrary to the speculative assumptions of Prange and Zander, we can exclude the possibility that Steiner derived the concept of the Rubicon from that of the second stubborn phase.

#### Child development according to spiritual science

Fairly early on Steiner put forward a theoretical account of development, in which – since it incorporated a phase-model – the Rubicon concept was implicit. Already in 1907 he gave a clear indication that spiritual science would be capable of generating a system of educational practice (cf. Peter Loebell's article in this volume). In doing so it would, on the one hand, have to answer those questions posed by the drive for renewal emanating from modern science. On the other hand, Steiner complained that many of the suggestions for reform being spread abroad in relation to a wide variety of areas of life and knowledge remained superficial, due, among other things, to the dominance of materialistic ways of thinking. This was equally true of reform efforts in the whole realm of education. The origins of this materialistic mode of interpretation lay, according to Steiner, in the principle that observation by means of the senses is the only source of reliable and verifiable knowledge (Steiner 1992, p.10). Within the context of this criticism we can readily accommodate all possible ways of extending human perception by means of instruments of measurement and observation. Steiner's target, however, is not primarily the methods of observation and the data they deliver, for these do undoubtedly bring to light aspects of the object of study (in this case: the human being). Rather, the key feature of the materialistic style of interpretation is, according to him, the verdict that all the structural properties of a living organism are in principle explicable as material components. In other words, appearance, structure, accessibility and explanation all remain on the same ontological (material) level.<sup>4</sup> Also changes in the course of an organism's ontogeny are accordingly effects arising out of the interaction of purely sense-perceptible forces. In contradistinction to this Steiner, in describing human development, speaks of a four-fold entity gradually manifesting in time, changing in the process and thereby acquiring the possibility of developing selfhood (personal identity centred around an individual "I").

- A. The *physical body* exists entirely in keeping with physical and biochemical laws insofar as these material components are present in it. This dimension of its existence it shares with the vast realms of inorganic nature.
- B. According to Steiner, however, the coherent mutual effects, *the living organisation* of the body's substances, cannot be explained by their physicality alone, in other words, "from below". To the principle of form working as a shaping power he assigns an ontological dynamic of its own, which he designates with the concept "etheric". The *etheric or life-body* is the formative influence which harmonises the physical processes and ensures the unity of organic function. This level the human being has in common with plants and animals, which also have living bodies that develop in time and space.
- C. As the third member of the totality that is the human being Steiner speaks of the *affective* or *astral body* as the essence of feeling-life. Functionally this is also the home territory of animals. In this area of consciousness appear the phenomena of sensation, pleasure, joy, pain, desire and drive (Steiner op. cit. p.13, Heusser 2007, p.169). This list points to what are mainly needs, states and implicit goals

<sup>4.</sup> Such a conception of science can be designated as "ontological naturalism" (Ziegler 2014, p. 9). In its rigidly exclusive appeal to materiality it distinguishes itself from "methodological naturalism" (Ziegler ibid., p. 10ff), which, although it favours empirical method, does not in principle exclude any dimension of reality. Methodological naturalism generally proceeds on the basis of a hypothetical realism and the assumption of a lawfully structured world (ibid.).

conducive to survival (Wandschneider 2014, p.178). It is a qualitatively describable realm of feeling, that is not yet capable of apprehending itself. It exhausts itself in the contents of its own mental states.

D. Finally, with the "I" Steiner designates something integral to human nature which we do not share with any other life-form. The "I" or "self", as the seat of conscious thought, is spirit or "the spiritual aspect of the soul" (Thomas Aquinas, cf. Beck, p.138ff.), and creates the unity of consciousness. In this area, however, human beings differ strongly from one another. While any healthy adult can use the appellation "I", the functioning of this self is highly individualised. The powers of thinking and of personal transformation are entirely dependent on individual initiative. It is pre-eminently in the way it unfolds through the medium of thinking that the structure of the conscious self is revealed (Steiner op. cit. p.16). In thinking the human being constructs the conceptual order in the light of which he interprets the phenomena of the world and his own existence.

Each of these four structural levels of the human being requires its own form of description. One main implication of this is that a "higher" mode of consciousness can only express itself by virtue of its resting upon a "lower" level. For instance, if someone is able to distinguish the tastes of different types of coffee, then they have the possibility of making a choice, and subsequently of turning an intention into action (a volitional act). Here the perception precedes the act of will, but the latter is not itself caused by the perception (it is possible to perceive any number of subjectively interesting objects without this leading to any subsequent action). The act of will is thus an inner process in a class by itself, and must be investigated in the terms specific to that particular class (Heusser 2007, p.170). The same goes for the other levels: the living organism (physical-etheric), psychic organisation (astral) and the Self (noetic) are each dependent on something "below" them, but on this basis determine the form of their own being.

"The Education of the Child ...", appearing in 1907, was Steiner's first major publication on the subject of education. The approach to teaching he advocates there is derived from the details of the developmental processes to which the four previously described levels are subject. Here two factors meet: the endogenous unfolding of the individual and the formative influence of caregivers and educators working from outside (exogenous influence). The endogenous dynamics are organised, according to Steiner, in a seven-year rhythm, although this is something of a schematic ideal, which is subject to considerable individual variation. Within the span of development up to young adulthood the inner, spiritual fabric of the human being is said to undergo three "births" at seven-year intervals: the period from physical birth to school-readiness is devoted to the structuring of the organism – sensory system, brain development, co-ordination of movement. At this stage the etheric body is still closely bound up with the physical body and is thus the prime mover in this transformative process. Around the age of seven, then, the organisation of the etheric body goes through a major change, the outwardly visible sign of which is the change of teeth. The etheric body is now no longer so closely bound to the physical body; it becomes free, and is said to be at the disposal of the child's awakening powers of cognition. Whereas up to school-age children learn predominantly by a process of participatory identification ("imitation"), they now have a need to find in the adult world someone who for them is an authentic representation of order. The authority of adults is no longer simply accepted. Primaryschool children increasingly pass judgement on their adult peers and push the boundaries accordingly. At 14, according to this model, the young person enters into puberty. The inner turmoil of this phase Steiner lays at the door of the astral body, which becomes free ("is born") at this time and is the vehicle of emotional awareness. And finally, at the age of 21, comes the birth of full selfhood (the "I"). With the capacities of thinking and will that have now unfolded the young person is empowered to navigate his or her own biography.

The second factor Steiner draws attention to is how those charged with the care and educating of young children may have a modulating effect upon their endogenous developmental processes. Accordingly, the educator's pedagogical role is described as being a complementary one: the tremendous changes that take place in the overall behaviour of little children from infancy to primary school age should be dealt with by educational caregivers in such a way that the emergent bio-physical impulses they represent can come to full expression. The other side of this, of course, is that children should be protected from stimuli and influences which they are not yet old enough to cope with:

"Just as the unborn child should not be exposed to the influences of the external world, so the etheric body should not be exposed – before the change of teeth – to influences which for it are equivalent to the effects the impressions of the physical environment have on the physical body. And upon the astral body the corresponding influences should not be permitted to come into play until after puberty." (Steiner 1992, p. 202)

Out of these two contrasting pedagogical principles – a *supportive attitude* towards everything emerging in the child's mental and physical development, and *protection against inappropriate influences* – Steiner then produced a wealth of educational ideas from 1919 on (see Selg 2011; Ruef 2012). If this intended protective function is transposed into the context of modern educational theory, then the person in the position of responsibility can be said to have, in Oevermann's sense, "both a therapeutic and prophylactic task" (Oevermann 1996b, p. 158). In keeping with such a view of education, the crises which inevitably arise during the processes of development and socialisation must be met with well-informed understanding and, where necessary, ironed out.

#### The Rubicon as a watershed moment in the second septennium

Steiner's essay "The Education of the Child ..." can with good reason be seen as the opening step in his presentation of human development in terms of spiritual science, although it only covers the period from birth to adolescence. At the same time, it is neither an example of "research" in spiritual science, nor can it claim to be in any way comprehensive. The essay is better regarded as a portrayal of a realm of phenomena which are normally interpreted rather differently, but will nonetheless produce biographical echoes in the memory of any reader. In his approach to explaining human development Steiner invokes patterns of forces which, although they do have spatio-temporal effects, are of non-material, super-sensible origin. For these he cannot offer any "proof", but only reasons for regarding them as plausible; in doing so the method he advocates is not based on charisma, but in principle upholds the possibility of direct understanding, which is also empirical.

In the course of the phases of development, with their three "spiritual" births, there occurs – in the middle of the second septennium – a moment which stands out. Steiner stipulates its timing in a number of different ways. Mostly he speaks of its occurring at the age of nine or ten, but there are many other instances when he seems to be thinking more of a *period*, which can easily extend into the child's eleventh year (Selg 2011, p. 17). Nor does he exclude the possibility that the Rubicon could begin at the age of eight.<sup>5</sup>

Upon the background of the birth of the etheric body and the incipient differentiation of mental functions it brings with it, the central event Steiner is concerned with can be characterised in three different ways: 1) as the first budding of self-awareness, which is also the recurrence, in a more spiritual form, of the first expression of selfhood at the age of two or three (Steiner 1994, p. 128; Ruef 2012, p. 16); 2) as a re-structuring of the relationship to the social world and to the world of objects; and 3) physiologically speaking, as the organisation of the so-called rhythmic system ("respiratory maturity").

In what follows these three fundamental perspectives, to which Steiner makes repeated reference, will be the main focus. Steiner evidently conceives the Rubicon as a crisis which is a normal part of development.<sup>6</sup> The framework of the event is personal experience of the awakening of selfhood. Müller-Wiedemann has described this as "the manifestation of the activity of the Self between childhood and youth – the moment when for the first time the child's feeling-life unfolds as a source of self-motivated experience." (Müller-

<sup>5. &</sup>quot;Many children reach this point before the age of nine, while others do so rather later, but on average what I'm going to tell you about today begins at nine years of age" (Steiner 1990, p. 96). The quotation clearly expresses the fact that the more frequently mentioned age of nine or ten is an average value, and should therefore not be dogmatically fixed.

<sup>6.</sup> Steiner often uses the expression "crisis" or "crisis moment" to characterise the rubicon, e.g. Steiner 1981, p. 41. In another context he speaks of "biographical transition(s), metamorphosis(es), which happen as a result of the change of teeth or a late start to puberty (cf. Steiner 1981, p. 41, also Selg 2011, p. 35). We designate Steiner's understanding of crisis as "normal", because he quite evidently conceives it as integral to the process of ontogenesis. What we have here are general terms, which therefore retain their validity even when the child's *subjective experience* is either absent or weak.

Wiedemann 1999, p. 31) In association with this the child becomes conscious of the way the relationship to the world was experienced in the first seven-year phase. At the same time, by way of contrast, there now dawns an awareness of a rather more detached form of existence. This combination of diffuse awareness of the past and a clearer feeling of being a separate, individual self leads the child to question his or her own existence. Before, neither the child's own past nor the future were an issue. According to Müller-Wiedemann this process takes in a period roughly between the ages of nine and twelve (ibid.).

At the same time, as regards the quality of the child's relationship to the world, this event is associated with an ebbing of the capacity for participatory identification ("imitation") by which the child was "bound into" non-conceptual learning processes in the first seven-year phase. This instinct for participatory identification is thus embedded in a kind of symbiosis between infant and caregiver. With the weakening of this capacity goes an inevitable change in the structure of the child's relationships. In place of identifying with the world through a principle of participation and having a symbiotic relationship with teachers and parents, new structures must be built up. The ideal result here would be an increase in autonomy and a concomitant expansion of the sphere of life. In Steiner's words:

"The after-effects of the capacity for participatory identification gradually disappear, and something then comes into play which ... can be readily observed: there arises for the child a special relationship to his or her own Self". (Steiner 1998, p. 172)

A further change that occurs is in the image the child has of her parents or teachers – they no longer have their unquestioned status. The natural authority that was an inherent quality of this living relationship breaks down in the face of this change in the child's inner world. If what counted for the little child was: "…there is the figure of authority, that reveals the world to me. I gaze into the cosmos through this person" (Steiner 1979, p. 45), now what we have is: "Is this authority figure the right one? Is this person giving me a true picture of the world?" (Steiner, ibid.) "Considerable strengthening ( … ), concentration of the feeling of selfhood" (Steiner 1980, p. 16), a new "kind of self-awareness" (Steiner 1994, p. 128), or a "felt coming-to-awareness of the self" (Selg 2011, p. 21). All this, of course, also re-configures relationships in an outward sense. The world of the Thou – "the Other as something other, in contrast to what is one's own – begins to pre-occupy the child for the first time."<sup>7</sup> (Selg ibid., p. 27)

Naturally this also includes a fundamental change in the child's relationship to the world of objects, as here described:

"At the moment around the age of nine when the Self awakens, the human being separates himself from his natural surroundings, and is now on the way to being able to make objective comparisons between natural phenomena." (Steiner 1998, p. 173)

For Steiner this is the point of departure for a wide range of teaching ideas, which in turn found their way into Waldorf school practice. Briefly speaking, we can say that this represents an experiment which involves taking a developmental moment conceived in terms of spiritual science and applying its implications in a practical educational context – a classical motif of educational psychology (cf. Krapp, Prenzel & Weidenmann 2006, p. 5f). Thus Steiner's Rubicon concept marks a boundary or threshold: teaching method *before* the Rubicon is in tune with the child's experience of oneness (participatory identification with the social and natural worlds). Pictorial narrative delivered by the teacher in a voice permeated with feeling will be conducive to this. *After* the change the possibility opens up of tackling the animal and plant worlds, mathematics, languages etc., using new concepts and methods of presentation in the process.

Thus classroom practice dovetails with the cognitive faculties emerging in the child, and chief among these is the ability – in association with pedagogical guidance – to form concepts. This can be seen as akin to Piaget's genetic theory of knowledge and to his theorem of concrete operational phases in middle childhood

<sup>7.</sup> Here it must be pointed out that Steiner only considers the changing I-thou relationship in child-adult terms. This, however, is too limited a view. Current studies on middle childhood also take account of peer relationships among 6 to 12-year-olds as a relevant element of socialisation over and above its asymmetric aspects. "For peers are not – like parents – simply there as matter of course, rather what we see are relationships freely chosen by both parties, and abandoned any time there is dissatisfaction or conflict. Thus peer relationships constitute a challenge: children must independently negotiate the rules of inter-personal interaction, represent their own interests, but also perceive and make allowances for the wishes of their opposite numbers." (Traub 2006, p.198)

(from age 8 to 12): consistency, the ability to compare objects and apprehend their variable appearance are, from this age on, no longer so strongly tied to concrete sensory phenomena. Rather, the child is now capable of relating more directly to conceptual criteria (even if often incapable of expressing this in language). (Piaget 1973, p. 38ff.) Within the social context this increased inner flexibility strongly affects the degree to which the child is able to distinguish *different perspectives*. Upon starting school the child is in a position to imagine what people think of each other, or of the child herself. She is also able "to relate one person's perspective to that of another in sequential co-ordination: e.g. the father would like to go for a walk with the child, because the child enjoys it." (Bischof-Köhler 2011, p. 346). Not until the age of ten, however, is the simultaneous perception of interacting perspectives possible. This means that the child is then able to perceive what someone thinks about something, and from that to extrapolate – and, where necessary, evaluate – the opinions of others who are involved (Selman 1984; Bischof-Köhler 2011, ibid.).

The changes the child goes through with the Rubicon, as put forward by Steiner, fall into two main observational categories: a) the child's behaviour in relation to the social world and b) in relation to the world of objects – the latter, of course, includes both the actual concrete relationship and the mental representation of the object. Children will give objects that have long had a set role in their picture of the world new meanings – for instance, freeing them from magical contexts.<sup>8</sup> And for Steiner, of course, the new relationship to the Self must be recognised as the *agent* of this re-structuring process. It is the deepened feeling of Selfhood that is the initiator of these changes. Steiner places this process in relation to changes in physiological structure.

According to his account of development the first seven years are dominated by the internal sculpturing of the organism. The formative movements of the etheric – at this stage still bound to the physical body – bring about the maturing of the sensory organisation. The child develops through sensory experiences of all kinds together with the emotional contexts in which they are embedded (child-parent relationship). For Piaget this is the phase of sensory-motor development (Piaget 1973, p. 102). With the entry into the second septennium and the release of the etheric body the formative development and synchronisation of rhythmic processes now come increasingly into play in the organism. Selg, who is a medical practitioner, summarises Steiner's view as follows:

"For the rhythmic system – the mutual interaction between breathing and blood circulation mediated by the heart – to take its rightful place at the centre of all organic life-processes, the different rhythms must come into balance with each other. On account of the general dominance of the head organisation (in other words, the neuro-sensory system), up until the middle of childhood respiratory processes ( ... ) outstrip the rhythms of blood circulation in their functional importance and power. Eventually, however, they accommodate themselves to the blood circulation ( ... ), and this leads to an individual balance being found." (Selg 2011, p. 40)

Even so, this achievement of co-ordination, the physiological trade-off between the frequencies of breath and heartbeat (in the adult this relationship sits more or less at eighteen breaths to every seventy two heartbeats), does not just happen harmoniously by itself. For Steiner it represents a physiological crisis, a "struggle within the organism" (Steiner 1989, p. 110), to be regarded as the "physical correlation" of the period of spiritual transition, and as such requiring special pedagogical attention (Steiner 1989, p. 110).<sup>9</sup> On the

<sup>8.</sup> The animistic (magical) mentality attributes motives or intentions to non-living objects in a sequence of events. This tendency can persist until school-age, but is then relatively quickly replaced by a concept of causality. (cf. Bischof-Köhler 2011, p. 348f.)

<sup>9.</sup> In a study by Breithaupt, Bestehorn, Zerm and Hildebrandt (1980) the ratio of breath to heartbeat was determined in 47 boarding-school children between the ages of six and thirteen and compared to that of a group of 50 adults. The results may be summarised as follows: "A fair degree of frequency co-ordination, as observable in adults, was also found in the schoolchildren. However, they displayed no supra-individual norm – especially noticeable was the absence of the normally expected adult ratio of 4:1. The findings point much more to a broad spectrum of preferred whole-number ratios, although certain differences appeared to be associated with different times of day and different age-groups. Particularly striking here are the higher mean values obtained during sleep (trophotropic) phase as opposed to wake (ergotrophic) phase. On account of the lack of any supra-individual ratio that could be described as the norm within this range of ages there is no possibility of applying a unified concept of what is normal for this age-group, although at certain ages an intensification of frequency co-ordination during the sleep (trophptropic) phase was observable". (ibid., p. 405) A study by Cysarz et al. was able to show the factors affecting the average heart-frequency over the course of child development: "in small children it lies at around 100 heartbeats per minute, at age 10 roughly 90 beats per minute. The heart rhythm changes correspondingly: in small children the rhythm is more static, since the higher frequency constrains the rhythm. From age 10 on the qualities of the heartbeat rhythms are comparable to those of an adult." (Cysarz 2008, p. 3; for more detail see Cysarz et al. 2011).

whole, however, he regards the "rhythmic system", during the phase from seven to fourteen, as a functional developmental unity, which lends the child new possibilities of expression, and should be pedagogically addressed particularly by means of music, movement and speech (Steiner 1987, p. 159).

Besides such suggestions as regards teaching method and content, Steiner points out the paramount necessity for adults in positions of responsibility to examine their attitude to the nine- or ten-year-old child. The nature of the adult's authority must be adjusted in a way that corresponds to the change of consciousness occurring in the child. This is a question of the gradual dissolving of the one-sided relationship that has been in place since the child's birth. In this state of asymmetry (in the relation of parent to child) the child's capacity for participatory identification enabled him to be compliant. He experienced a universally valid order as authority inherent in the quality of the relationship itself. Emancipation from this order also causes the figures of authority to appear in a different light. The freed-up inner impulses of the child's soul compel her to the question of whether the order represented by parental authority is authentically living up to itself or not. In this critical state the child may be able to find an inner support, if those responsible for her welfare are able to make her aware of a higher order through their own behaviour. The way the adult communicates with the child can then take on more the tone of a lawgiver. In form, content and personal authenticity this new style will, in turn, point to something beyond itself – a world of nobility, of steadfast foundations. This quasi-religious notion has been expressed by Steiner as concretely as could be wished:

"(...) in the phase of life between the ages of nine and ten when the child first acquires the ability to distinguish himself clearly from the world, it is essential, in the interests of the whole future moral life of humanity, that he have someone he can look up to with the greatest respect, someone in the role of teacher, whom he venerates as an authority." (Steiner 1998, p. 264)

And then a little further on:

"Moral, religious education rests entirely upon the child's going through this experience of veneration at this key point in life around the age of nine or ten." (Steiner ibid., p. 264)

Here it is not a question of who the role-model is, and least of all – as might be objected – of suppressing the child's rights by establishing an ethos of uncritical obedience. All Steiner intends is that the pedagogical authoritativeness of the teacher should include an indwelling transcendent<sup>10</sup> quality, which lights up in the child's inner awareness. Only after adolescence, then, will she be able to subject the principle involved to intellectual scrutiny.<sup>11</sup> The child's experience should be that "the divine lives in nature just as it does in all human development …" As a stabilising factor and point of orientation during this crisis of identity the "authority figure" becomes the mediator between the subjectivity of the child and a higher level of reality. Later in life, when the child has come of age, he will be able to determine his own response to this higher level.<sup>12</sup>

<sup>10.</sup> This way of thinking, which sets certain forms of human action in relation to transcendent levels of reality and formulates their mutual pedagogical implications, exists in other cultures, e.g. Chinese: "Through that which is truthful and authentic [in human action] the Divine, the transcendent becomes anthropomorphised. Through this ontological manifestation heaven draws near to earth and thus, on the one hand, bestows an anthropomorphic form upon the immanent manifestation of transcendence, which grants the human being participatory awareness of his feelings and life experience, and on the other provides a comprehensible model for the human being's every-day intimations of transcendence, out of which an implicit basis for morality arises..." (Yang 2004, p. 114)

<sup>11.</sup> Steiner's utterances on authority in an educational context clearly indicate that he uses the concept in a dynamic sense. One point of departure for an appropriately balanced attitude to authority he gains from his analysis of the child-adult relationship. This is subject to qualitative changes, because the child is on the way to becoming a self-determined individual. Thus the relationship to authority is itself subject to change. An authoritarian approach to education would take no account of these dynamics. Steiner's explicitly non-static concept of authority has a kinship to a theorem currently advocated by some educational academics. This is the theorem of interactional authority (also known as pedagogical authority), which presumes a principle of acknowledgement. The child's acknowledgement of the authority figure is directly related to that figure's perceived competence in a variety of life-situations ("epistemic authority" according to Bochenski 1974). This means "(...) the actual authority lasts only as long as such a relationship subsists between the acknowledger and the acknowledged. As soon as one of the partners dissolves this interactive arrangement the relationship of authority also comes to an end." (Latzko 2012, p. 578)

<sup>12.</sup> For Hegel also such a relationship culminates in a concept of authority: "The contingency out of which a necessity is to arise, the ephemeral upon which in the human being the consciousness of the eternal, the relationship in him between feeling, thought, and action is to be based, this ephemeral, from a general perspective, is called *authority*." (Hegel 1983, p. 223)

Here, of course, it becomes clear just how far-reaching Steiner's definition of the teacher's task is, for it encompasses both the imparting of values in general and the provision of a safety net for the developmental crisis of middle childhood. This high demand and the idea of charismatic authority that follows from it has been singled out for critical comment by Helsper (2007, p.74ff.). He feels that the unbroken tradition of pedagogical authority which is still strong within Waldorf education runs counter to modern social trends and boils down to what is basically a "de-modernisation reflex" (Helsper ibid.).

#### Excursus: the Rubicon and Oevermann's crisis typology

There is branch of modern sociological research which appears well-suited to moving our examination of the Rubicon a stage further. In particular it provides a new conceptual framework for Steiner's pedagogical-therapeutic approach to solving the problem of authority associated with the Rubicon. To this end we will, in what follows, present a sketch of Oevermann's theory of crisis types, which includes formulations of strategies people use in overcoming crises of various kinds. A thorough presentation of Oevermann's theoretical approach is contained in *Strukturalen Sozialisationstheorie* by H-J. Wagner (Wagner 2004a, 2004b, 2001). We take our lead from this.

Accordingly, Oevermann identifies three distinct structural types of crisis that human subjects can find themselves in. The methods of alleviating, improving or completely overcoming each particular type are equally distinct from one another. The typology is as follows:

- 1. The crisis as a confrontation with unexpected facts *(brute facts)* the traumatic crisis (Wagner 2004b, p. 38).
- 2. The crisis of decision.
- 3. The unforced crisis

On type 1): *The traumatic crisis.* According to this profile a person finds their way of life suddenly confronted by some external or inner event in such a way that its normal routine cannot be maintained. It is impossible not to react to this class of events (Wagner op. cit., p.38). The intensity of a crisis like this, bringing mental and bodily stress in its train, is or can be traumatic in its effect. The person concerned will only be able to counter this effect by considerable inner effort and/or by means of support from others.

On type 2): *The crisis of decision.* This type of crisis arises through a subject's attempt to deal with a variety of options, all of which have unavoidable practical implications. Since the conduct of daily life involves us in applying our reason to the question of the pursuance, evaluation or avoidance of objectively competing courses of action, the individual is constantly under pressure to make decisions. Among these are certain ones with unknown implications for the future. These are decisions of far-reaching significance, because they establish a *point of no return* with long-term consequences, as, for instance, the decision to marry *this* partner, or to have a child. Here the principle also applies that one can *not not* decide (Wagner ibid. p. 39).

On Type 3): *The unforced crisis*. This arises within the individual's scope for freedom of action and, according to Oevermann, can be seen as analogous to aesthetic experience. This type of crisis involves, for instance, taking up a new challenge of some kind regardless of its unforeseeable consequences. An example of this could be: resigning from a secure job in order to take up a new professional task, which, although difficult, is full of potential. Only in retrospect will the person taking such an action be able to evaluate whether the unforced decision to take up the challenge was worthwhile or not. Here what is in play is intense awareness of a newly encountered possibility, which one decides to pursue, in spite of the high risk involved. On account of the unusual perceptual intensity involved here, such a moment of openness may be considered as comparable to an aesthetic experience (Oevermann 1996a, p. 46; Wagner 2004b, p. 40).

The course of growth and development is marked by a series of events which originate in the body, while being closely bound up with the growing individual's experience of those responsible for his or her welfare. Living through these experiences ultimately brings about change both in the relationship to self and to the

world at large, and this in turn opens new avenues of action. As a rule, however, such possibilities only open up when an individual lets go of supportive structures he has formerly been used to. Along with this gradual dissolving of old ties goes the opportunity to take certain steps along the path towards personal identity. Insofar as these critical experiences represent essential stations in individual development, in other words, they are integral to the whole process of physical and mental ontogenesis, we may justifiably speak of "ontogenetic emancipatory crises" (Wagner 2004b, p. 368ff.). The various schools of psychology differ in their interpretation of these phenomena, but the fact that it makes sense to speak of such separation processes occurring in the course of development is not at issue. More or less across the board, in other words, there is consensus on this point. From a psychoanalytical perspective Oevermann defines the following series of separation crises: pregnancy to birth, release from the early symbiotic relationship between mother and infant, the Oedipus crisis, the latency period (school, mid-childhood), and adolescence. Since the individual is not in a position to decide whether to go through these crises – because they arise from the inevitable dynamics of endogenous development - they belong under the heading of the traumatic crisis. The individual cannot decide to avoid the demands of these gradual emancipation processes. Such an attempt, should it result in the failure of an emancipatory step, would compromise ego-development. For this reason socialisation theory does not look for ways of avoiding the crises, but analyses the psychological requirements for coping with their inevitable occurrence.

In performing this analysis Oevermann formulates a triad of conditions for coming to terms with emancipation crises. In his view the first two of these factors are closely bound up with primary experience of ontogenesis and form the basis for long-term mental dispositions. The triad comprises: a) *convictions*, b) *belief*, c) *knowledge*.

Convictions, in the sense used here, are habits deeply anchored in our life-experience. They are formed out of the early symbiotic phase, i.e. they are intimately associated with the bonding structures of early childhood, such as exist in the mother-child dyad. Later they are aspects of the "process of community formation within the family context" (Wagner 2004b, p. 31) and of conviction-inducing experiences within peer groups:

"All these succeeding places where development calls a halt to something, each one corresponding to a specific stage of the process, offer scope for experimentation and guarantee protection. Anyone who has had sufficient unquestioning and straightforward experience of such transitions will have internalised convictions corresponding to them. They sit in a person's life-history like sediments, which she will not later be willing to modify to any significant extent, let alone relinquish, except in the case of some extreme crisis of change." (Oevermann 2000, quot. by Wagner, ibid.)

Thus what manifests in convictions are affective and cognitive patterns, which have originated in primary experience of relationships. They are visceral and difficult to access consciously; they thus elude complete objectification. For instance, according to this view, a person who has been party to a successful mother-child symbiosis (known in bonding theory as "the secure bond", cf. Grossmann & Grossmann 2009) will, when facing a crisis later in life, find himself driven by the conviction that he can turn to other people for support. For this to be an easily repeatable pattern of behaviour it must be deeply anchored in past experience of being able to rely on other people (Kissgen 2009, p. 98).

While convictions arise from bonding structures, *belief* is a result of emancipation processes. It is itself a child of crisis, and at the same time an important part of the solution. Thus Oevermann puts forward a functional belief concept, which can be interpreted in specifically religious, but also in more broadly secular terms. Having been through a successful symbiosis with its mother, the child enters upon a series of emancipatory steps. Research into bonding shows that emancipation is more likely to succeed the more trusting the primary experience has been (Faix 2004, p. 278). Even so, however, the process is likely to be conflict-laden, partly because the child, in loosening herself from the protective parental sphere, builds up feelings of guilt. The signs of such guilt feelings may manifest at times in obviously ambivalent behaviour: for instance, in the occurrence of a pattern involving gestures of both rejection and clinging. *Following upon enjoyment of the early symbiosis* the child experiences the paradoxical dynamics of entanglement in guilt as the price of emancipation. This he is not capable of mentally grasping in rational terms, nor of controlling.

It thus demands resolution through some third medium of reconciliation. But because this is not to be found in this world, with its insoluble paradox of wishing at the same time to leave and keep the beloved, it is sought elsewhere. The structure which here, according to Oevermann, comes into play is the "belief in a higher order authority, which could be designated as an ultimate spiritual power. Whatever its concrete form and content, loyalty to it then brings with it the hope of reconciliation and vindication. Such belief is thus the polar counterpart to conviction, and equally essential for overcoming crisis." (Oevermann 2000, cited in Wagner 2001, p. 199) This glimpse into the sociology of religion gives us an approach to viewing crisis moments in development as a source of transformation, and in the process treats *religio* in its sense of a "re-binding" to something seemingly lost. Here it is significant that Oevermann formulates the concept of belief in a neutral way, i.e. without explaining it exclusively in terms of religious content or of secular function.<sup>13</sup> This means that the concrete interpretation of "spirit", "power" or "authority" is a matter for the subject, and is surely also decisively coloured by whatever biographical influences have been at work in the socialisation process.

Finally, coming to terms with a crisis can never succeed without a store of *knowledge* the individual can call upon. Oevermann, however, does not associate the concept of knowledge directly with the occurrence of crisis, as he does in the case of conviction and belief. Rather he shifts it into the sphere of routine (Oevermann 2000; Wagner 2001, p. 200f.). Knowledge arises from experience, insofar as, over time, it yields "proven assumptions", which establish themselves as generally reliable social dicta. Faced with crisis, human subjects fall back on such knowledge; in other words, without recourse to reliable routines they would fail to master the crisis, for when all normally valid behaviour patterns go critical, then the moment of breakdown has arrived. Here it is worth pointing out that the possibility of recourse to the sphere of knowledge through routines largely depends upon the stage of development of the person concerned, and is thus age-specific. This renders all the more significant the fact that adults in positions of responsibility towards children can make them feel secure by providing "substitute precepts"<sup>14</sup> for their guidance. Such substitute precepts thus represent a form of knowledge which does not stem from the child's own experience, but is derived from other contexts and is, as it were, a readily available pedagogical authority.

If we look at the crisis of middle childhood in terms of these two interpretive approaches the following structural elements come to light:

The theory of socialisation structure describes emancipation crises as ontogenetically essential, because only the dialectical dynamics of symbiosis and emancipation can call forth the autonomy of the developing personality. Thus in relation to development all crises are equally relevant; the dynamics of reliability, in which the individual is inextricably bound up, is what enables development to progress towards autonomous selfhood. For the ability to get through crises Oevermann attributes major significance to primary experience of relationships. If this was positive over sufficient time, it results in the conviction that crises can in principle be overcome. However, the structurally inevitable traumatic aspect of the identity crisis demands that there be something more in play, an authority which must act as a further source of trust. Belief in some transcendent power can be mediated in the form of substitute precepts by "significant others" or parents/ figures of responsibility.

Steiner, by contrast, conceives of the *Rubicon* - with all the features listed here – as a phase of ontogenetic development, and assigns to it a pre-eminent significance in the formation of personal identity. It stands out in this way partly because his treatment of puberty and adolescence was much less sharply drawn. This is something for which, from the point of view of modern research, he is open to criticism. At any rate, he regards the first years of life as a highly significant period in a child's development. From the experience of being "enfolded" in the dyadic relationship – if it goes well – the child takes with her the feeling that the

<sup>13.</sup> Following on from Max Weber, Oevermann's approach to the sociology of religion thus re-emphasises the notion of the *probationary dynamics* that all experience of life entails. Biographically the three crisis types are of enormous and unavoidable importance. The feeling of being tested is the mode through which any given individual works upon a crisis. Cf. Wohlrab-Sahr 2002, p. 20

<sup>14.</sup> Note that the concept of the "substitute precept" is derived from the realm of the therapeutic professions, and has been modified for use in the sphere of educational practice.

world into which she has been born is true, good and beautiful.<sup>15</sup> The task of child-rearing thus consists in giving the child a pure, unadulterated experience that makes him feel at home in the world. The feeling of security the child thereby experiences is the prerequisite for all future knowledge acquisition. For Steiner the Rubicon is a pedagogically challenging moment requiring special skills. Here the teacher is once more the representative of a "higher order". Through the integrity of his presence and bearing he can be the vehicle of a transcendent reality that gives security and direction. In contrast to Oevermann, Steiner, of course, sees the religious aspect of this situation in terms of spiritual realities, rather than as purely functional.

## The Rubicon / Middle Childhood: from the perspective of developmental psychology

In what has been said so far we have tried to make clear that in child development the Rubicon stands out as a landmark with features which are both mental and, in the widest sense, organismic. The way Steiner presents it, the whole event takes place within a period between the ages of 8 and eleven, and is the expression of a dynamic process driving forward the child's development of selfhood. Even though Steiner's concept of "the Rubicon" is not used as such in modern developmental psychology, it is nonetheless possible to draw parallels in both content and structure between the two styles of approach. This we will do briefly in what follows.

Applying terms from developmental psychology to the Rubicon-related phenomena listed here, we could speak – as does Erikson – of the inception of a feeling of personal identity, which is both perceived and subjected to scrutiny. Erikson, however, places the formation of personal identity firmly in the middle of adolescence (Erikson 2000; Marcia 1980).

There is, nonetheless, in the field of developmental psychology the related idea of the *self-concept*, which readily incorporates early childhood phases (Unzner 2009, p. 13) and in this connection speaks of "a person's thoughts, feelings and judgements about themselves" (Unzner ibid.; Roebers 2007). There is empirical evidence showing that early childhood is the period in which the development of the self-concept begins. Accordingly, two-year-olds understand the limits and limitations of their own body. A little later they are able to recognise themselves in a mirror or in videos and pictures, and understand the signs of feelings and intentions in others. "The self-concept becomes increasingly differentiated with the growth of cognitive abilities in the course of childhood, reaching a state of relative stability from around the age of ten." (Unzner ibid., p. 13)

The faculty of *self-concept modification* is often regarded in the literature as the main indicator that the child has reached the phase of middle childhood. Kathleen Dwyer, for instance, puts it as follows:

"Also during middle childhood, children's self-concepts and their conceptions of others become more comprehensive, such that they increasingly focus on inner traits and encompass generalities across behaviors. With a more solid sense of self, children are increasingly able to regulate their own behaviors." (Dwyer 2005, S. 3)

And Fegert, who locates middle childhood between the ages of 7 and 11 to 12, detects self-concept modification in the expansion of the child's inner and outer activity. The "multiple new experiences in a variety of living contexts involving interactions with a large number of people – in school, sports clubs etc." he regards as factors determining this process of change (Fegert 2011, p. 11). Fegert here underlines the first occurrence of discrimination between an *ideal self* and a *real self*. Whereas the infant still has the experience of unity, the child of school age becomes capable of making distinctions, largely through comparing herself with those in her social milieu. Between motor skills (physical self-concept), academic learning and social life a heterogeneous self-image begins to crystallise out. Upon this basis Fegert diagnoses, from school-

<sup>15.</sup> The teacher is not there just to present the true, the good and the beautiful to the child, but, in a certain sense, to be them. All teaching content must be placed before the child with exemplary concreteness. Teaching must be a work of art, not theoretical content." (Steiner 1979, p. 221) Expressed in the language of the structural theory of socialisation, this could read: In objective sensory inputs illustrated in accordance with artistic theory and from ... the child learns ...

age on, a typical fall in self-esteem, which may last until puberty (Fegert ibid.). He sees a further inner tendency towards crisis in middle childhood in the appearance of "mixed feelings". The child experiences the simultaneous occurrence of contradictory feelings, which may very well arise from the tension between a genuine inner feeling and a contrasting social expectation (Fegert op. cit., p. 12). Furthermore, Fegert also stresses the tenth year of life as a kind of middle of middle-childhood: From 10 onwards the strategies of emotional regulation markedly improve. The child puts increased effort into:

- strategies of social support
- concrete problem solving strategies
- problem avoidance strategies
- A general aim is that of achieving emotional self-assurance (Fegert ibid.).

If up to now middle childhood was a developmental phase among others, as a research theme it has recently come in for increasing attention. In 2011 a special edition of the journal *Human Nature* was devoted to this subject. It featured cross-cultural articles that addressed the theory of how this phase evolved, as well as its physiological correlates and its cultural and ecological variability (Campell 2011).

In the latest studies middle childhood is regarded as having a prominent influence on future biographical development. In their account of this period Marco Del Guidice<sup>16</sup> and his collaborators consider not only the cluster of mental, motor and social factors that make their appearance between the ages of 6 and 12 (as mentioned above), but also biological, or more precisely, endocrinological processes. For instance, it is a well-founded fact that cortisol levels peak dramatically in new-borns and henceforth remain stable, while between the ages of 6 and 9 there is a sharp rise in adrenal androgens (Stolecke 1997, p. 103).

"This physiological and purely biological maturation landmark is designated as the adrenarche, and it persists in quantitative terms into puberty" (Stolecke ibid.).

Del Guidice ascribes a regulatory function during this period of childhood to the adrenarche. He sees it as mediating between individual life-history and genetic disposition (Del Guidice 2014, p. 5; West-Eberhard 2003). Responsibility for this is assigned to an adrenal hormone which is formed only in humans and higher Primates. In girls maturation of the adrenal gland begins from the age of nine on with a rise in the production of the 17-ketosteroid hormone. In the blood measureable rises in the pre-hormone dehydroepiandrosteron (DHEA) and its sulphureted form (DHEAS) occur at this time (Del Guidice 2014, p. 4). Six to twelve months later signs of the pubarche – the beginnings of secondary hair-growth – become detectable as a result of the transformation of DHEA into the male sex hormone testosterone. This hormone is present at birth, but then sharply decreases only to resume synthesis during middle childhood. Its function here is still largely unclear.

Middle childhood is thus the time – anthropologically speaking – when children go through a successive process of emancipation from those with whom they have had primary bonding relationships. In contrast to mammals generally, however, they have at this stage not yet reached sexual maturity, and so have at their disposal an additional window of time for personality development, during which the impulses of their burgeoning selfhood can come to expression. Quite apart from all this, in numerous cultures children of this age are given the role of sharing responsibility for the production and preparation of food and for caring for their younger siblings. A specific legal age at which such responsibilities can be given to a child, as has become the norm in technologically developed Western cultures, cannot be generally assumed.

Through research on bonding it is also becoming increasingly clear that the way the "points are set" at this time is of crucial importance for the future state of health of the person concerned. Svenja Zellmer, for instance, draws attention to the mutual relationship between resilience and bonding in the period from preschool to middle childhood (Zellmer).

<sup>16.</sup> Cf. Del Guidice, Angeleri & Mnaera 2009; Colle & Del Guidice 2011 and Del Guidice 2014. Middle childhood is here described as a "developmental switch point in human life history" (Colle & Del Guidice 2009).

In the same vein, we can refer to the work Mary Jane West-Eberhard (West-Eberhard 2003, p. 129ff), who describes those directionally determining events of middle childhood that are relevant to development. For her such developmental switches belong to a category of events which generate information from the surrounding world to an extent sufficient to offer the individual concerned a variety of developmental pathways. In these change-sensitive phases the individuals concerned are particularly vulnerable, and therefore in need of guidance, because the emerging changes can have a fundamental effect upon their further development.

From all this it would appear that Steiner's concept of the *Rubicon* is being given clear modern contours within the context of today's research. Albeit with different accentuation, the main features attributed to this pre-pubertal transformation process – *biographical direction-setting, development of identity* and *physiological expression* – may very well serve as points of orientation for middle childhood research. Just what new implications Steiner's Rubicon concept may have for therapeutic practice and methods of dealing with crises remains to be shown by further studies, both theoretical and empirical.

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