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Conclusion, Judgment, Concept: The Quality of Understanding

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ABSTRACT. This essay is based on the proposition that the pupils' level of understanding is a key indicator of the quality of teaching. Understanding, as a productive act on the part of the students, integrating subject and object, self and world, constantly extends the complexity of the context under consideration. In connection with R. Steiner's comprehensive description of human nature, three fundamental forms of this act of understanding are considered: namely, conclusion, judgment, and concept. These provide the basis for understanding meaning, for understanding oneself and for understanding the world. In correspondence to this trio stand the teacher's pedagogical skills - his or her ability to encourage self-motivated learning in the students. This happens not through piling up facts, but through teaching which is explorative in style, and which holds the cultivation of a questioning attitude in just as high regard as the collective discovery of answers.

Keywords: Waldorf education, comprehensive description of human nature, conclusion, judgment, concept, human understanding, quality of teaching, pedagogical skill.

Understanding

A number of criteria and a matching number of different approaches exist for the assessment of the quality of classroom teaching. (Helmke, 2007) In the somewhat politically dominated discussion that ensued following the first PISA study in 2000 (German Pisa Consortium, 2002) the question of quality of teaching became increasingly subject to a qualitative analysis objectifiable by teaching results by means of performance assessment. However, less consideration is being given to process or subject-oriented criteria, as has been evident in the educational policy decisions of several German federal states (central student assessments of the individual grades, introduction of standardized tests, etc.). It is the object of the present study to develop a specific criterion of the quality of teaching, namely the quality of understanding, based on the decidedly subject or personality-oriented approach of Waldorf education, viewed from an educational-philosophical perspective. The study is based on the starting thesis that the quality of teaching depends substantially on the act or process of the student's understanding. Teaching is only of benefit and of interest where the individual student, firstly, has a sense of understanding of what is being taught and, secondly, has a better understanding of something that he or she previously did not understand.

This poses the question, what does *understanding* actually mean? An initial approximation may describe *understanding* as the grasping of an overall context. It is the ability to give contextual meaning to something that is initially incoherent or disconnected. In that sense, it is the power to reach beyond disconnectedness. If, for example, the technically less adept looks at the engine of a car, they will see nothing but individual component parts, the combined action of which remains obscure to them. However, as soon as the workings of the engine are *understood*, the connectedness of the components becomes transparent. *Understanding* therefore means to grasp the relationships. This is the structural aspect of understanding, leaving open as to what *relationhips* may be. Looking at the aspect of experiencing, *understanding* has an eminently stimulating effect. It is a kind of *experience in motion*, i.e. it is not, as one might think, a state of standstill or a coming-to-an-end because all questions have been answered. To the contrary, it is a stimulating experience in motion, one that awakens interest. It is like a current that draws the student deeper into what is being understood. Hence, understanding does not provide answers but enables the student to ask further questions. It is not without questions but asking, awakening interest, exploring, leading, and probing. Both students and teachers may

experience this quality of understanding very vividly in the classroom. Understanding is enveloped in an atmosphere of alertness, inquisitiveness and enthusiasm. It is therefore something that is actually very desirable in a classroom setting.

Before going into detail about specific methodological elements of Waldorf teaching likely to promote the process of understanding in students, attention should be drawn to the epistemological preconditions that form the basis of Waldorf education.

The epistemological basis of Waldorf education

In current academic dialog, Waldorf education only features rudimentarily, where essentially, it is treated critically at best and hostile at worst. The main criticism is leveled at its ideological integration of teaching into *anthroposophy*, a humanistic concept developed by Rudolf Steiner. (Ullrich, 1986; Prange 2000). The spiritual aspects argued by Steiner and which form the basis of Waldorf education appear to be incompatible with a contemporary concept of science. Less attention is paid to the fact that Rudolf Steiner himself saw his spiritual approach firmly based on a clearly defined epistemological position. This can be condensed into the statement: *Thinking does not happen in our heads but in the things around us.* What does this mean? Rudolf Steiner's own explanation may shed some light on this idea:

If I can formulate thoughts about things, and learn to understand them through thinking, then these things themselves must first have contained these thoughts. The things must have been built up according to these thoughts, and only because this is so can I in turn extract these thoughts from the things. – It can be imagined that this world outside and around us may be regarded in the same way as a watch. [...] The fact must be kept clearly in mind that the wheels have not united and fitted themselves together of their own accord and thus made the watch "go" [...] Through thoughts the watch has come into existence. (Steiner, 1930, p. 11)

Thus far, Steiner's reasoning is easily comprehensible. What follows though is a surprising leap:

The works and phenomena of nature must be viewed in a similar way. - Thus, when a man thinks about things he only re-thinks what is already in them. (Steiner, ibid.)

This thought can also be visualized using the above example of the car engine, where the act of understanding is described as the grasping of the functional context. This means that the laws underlying the phenomena can be grasped by man's thinking. As illustrated by the above quotations, what is still easily comprehensible where artifacts (engine, watch, etc.) are concerned - after all, the rules they are based on were 'invented' by humans - in principle and according to the epistemological position of Waldorf education also applies to the cognition of objects that are not man-made but belong to the natural world. According to this principle, the laws by which things are governed are unveiled by thinking cognition. This is aptly encapsulated in the famous words of Goethe's *Faust*: 'So that I may perceive whatever holds the world together in its inmost folds.'

The particularity of this epistemological position becomes more apparent when juxtaposed with other approaches: The commonly advocated concept of cognition which is based in the everyday consciousness but also extends, with philosophical simplicity, into the most differentiated theories of cognition in contemporary brain research, assumes that relationships are perceived or, which is the common sense, are derived from perception. In philosophical terms, this position is referred to as *naive realism* because reality is accepted as something that is preexisting. In contrast, a philosophically more advanced, enlightened position is referred to as *critical rationalism*. Critical rationalism generates a diagnosis of the part human cognition plays in the shaping of reality. Accordingly, reality does not preexist but is the product of an act of consciousness. It must thus be concluded that reality existing in this sense is only significant for man. Immanuel Kant, the most prominent proponent of this view, states accordingly in his *Critique of Pure Reason*:

For laws do not exist in the phenomena any more than the phenomena exist as things in themselves. Laws do not exist except by relation to the subject in which the phenomena inhere, in so far as it possesses understanding, just as phenomena have no existence except by relation to the same existing subject in so far as it has senses. To things as things in themselves, conformability to law must necessarily belong independently of an understanding to cognize them. But phenomena are only representations of things which are utterly unknown in respect to what they are in themselves. But as mere representations, they stand under no law of conjunction except that which the conjoining faculty prescribes. (Kant, 1974, p. 156)

Kant therefore assumes that both the laws recognized by human reason as well as sense perceptions exist for man only. In this view, human consciousness exists in an autonomous mindscape, called reality, which is not necessarily related to a purely hypothetically imagined world that exists *in itself* - Kant refers to it as 'things in themselves' - and which simply cannot be elaborated on.

^{1.} One exception is Schneider (1982).

Today, this view is prominently represented in *constructivism*, as expressed e.g. by Erich von Glasersfeld:

In the constructivist view [...] knowledge does not create images of the world at all. Rather, it comprises plots, concepts, and thoughts, and separates those deemed useful from useless ones. In other words, knowledge consists in ways and means conceptualized by the cognizing subject in order to adapt to the world it experiences. (Glasersfeld, 1996, p. 210)

Constructivism is of great importance as it focuses on the subject-based attitudes of consciousness which dominate our world view. It does so by highlighting the historical, cultural, and socio-biographical, more or less conscious, ideological dispositions,² and thus makes comprehensible that our world view is subject to extraordinary physical influences.. However, the question remains as to the necessity of the radical proposition that the reality of consciousness has no connection with any world, however conceived or imagined.

Earlier, I summarized the epistemological position of Waldorf education in the sentence *Thinking doesn't happen in our heads but in the things around us.* In contrast, the belief of constructivism may be summed up as *Thinking only happens in our heads.* Juxtaposing these contrasting views makes plain the currently unpopular position of Waldorf education: It assumes that the relationships between things are discovered in those things themselves, by way of thinking. Thus, knowledge is neither objective reception (*naive realism*) nor is it subjective construction (*critical rationalism* or *constructivism*) but a generative process that links subject and object. Against this backdrop, the process of understanding appears more clearly defined: Because relationships are *not* predefined and *cannot* be perceived, it is up to the subject, by intensifying their own cognitive activity, to penetrate deeper into the object in order to grasp its inherent law-governed relationship, which is not a construction but a concurrence of an ontologically objective continuance. It is an active accord with the laws inherent in things.

In classroom research, this act of understanding is referred to as *procedural* knowledge (as opposed to *declarative* knowledge). This may be illustrated by the following example. When explaining to someone how to ride a bicycle, one could just tell them to mount the saddle, hold on to the handle bars, push the pedals and try to keep their balance by not tilting to the right or left. This would describe the act of riding a bicycle fairly adequately. But understanding this does not provide one with the ability to ride a bicycle. To the contrary, being able to ride a bicycle means mastering the laws inherent in bicycle-riding. One just implements those laws. This form of a practical, skill-engendering learning is emphasized in the working approach of Freinet. (Freinet, 1983)

These epistemological deliberations may seem somewhat abstract. However, from an educational viewpoint they are vitally important. For example, the salutogenetic criterion of coherency as cited by Aaron Antonovsky comprises *meaningfulness*, *comprehensibility*, *manageability* and *identification* (Antonovsky, 1997). The educational conclusion is that children grow up in a world that, in principle, is not alien or inaccessible to them. It is pervaded by a meaningful structure that they can understand and, using their abilities, learn to master. This enables them to identify with the world around them. Those are basic pedagogical values that are relevant to Waldorf education.

Methodological aspects of understanding in the classroom

In the sense characterized here, *understanding* is a process performed by the individual. While therefore subject-based, it also comprises an objective grasp of reality. How can this process be encouraged in the classroom? In the basic introductory talks on the occasion of the foundation in 1919 of the first Waldorf school in Stuttgart, summarized in his *Study of Man*, Rudolf Steiner develops a *teaching of understanding*, as it were.³ In one of the lectures, he takes up Aristotle's logical operations of *conclusion*, *judgment* and *concept*, which are discussed extensively in philosophical literature. However, Steiner speaks about them in his very own context of meaning which, initially, is difficult to comprehend. In traditional philosophical understanding, it is the *concept* of a thing that is of primary importance. We form ideas or abstractions based on the things around us. In a second step, *judgments* are acts of attributing which are added to a concept. Known examples are, e.g., 'All men are mortal' and 'Cajus is human'. In the former statement, the attribute 'mortal' is added to 'man', while in the latter, the attribute 'human' is added to 'Cajus'. The *conclusion* then is the linking of the two judgments based on the laws of logic: 'Therefore, Cajus is mortal.'

^{2.} Thomas S. Kuhn (1976) drew attention to this phenomenon of changing views of reality throughout the history of science.

^{3.} Rudolf Steiner (1919; ⁹2005, p. 155); Lecture IX given in Stuttgart on August 30, 1919; see also the deliberations by Stefan Leber, 2002 (pp.239-329).

Conclusion

In Steiner's view, this relationship is reversed. He sets out with the *conclusion*, but conceives of it as something different. Steiner gives the example of someone visiting a menagerie and seeing a lion:

What do you do first of all when you perceive the lion? First you bring what you see in the lion to your consciousness; and only by this bringing-to-consciousness do you gain an understanding of your perceptions of the lion. [...] The first thing you form is a *conclusion*... (Steiner, 2005, p. 154).

He then restates his point more clearly:

The first thing in life is conclusions. And in reality, if when we go into the menagerie we do not exclude our perception of the lion from the rest of our experience, but bring it into line with the whole of our previous experience, then what we accomplish first [...] is the drawing of a conclusion. (ibid.).

Based on this understanding, *conclusion* is an initial unlocking of a relationship, a connecting of a new experience with one's own continuum of comprehension or understanding. It is exactly because relationships are *not* perceived - as is the above outlined epistemological position of Waldorf education - and the concept of the lion is *not* revealed by way of perception, that the things, the contents of our perception, must be unlocked in an initial step of ideational realization. Therefore, even the initial encounter with the world requires a creative act of understanding. However in everyday life, this generally remains below the level of consciousness as we normally deal with a world we already understand. We have the impression of a *ready-made reality* and in whose realization we have no part. The reason for this is that the principal acts of cognition of our perception of reality take place in childhood and are subsequently performed unconsciously.⁴ In adult life, the act of unlocking the world has become a more or less unconscious process. It is only new and very complex impressions never previously encountered and transcending accustomed perceptions of reality, e.g. in cultural, social, technical or artistic contexts, that require a heightened awareness and willingness to engage. Such challenges to our perception of reality are typically provoked by the arts.

For children, the unlocking of their world, their reality is their foremost task. Developmental psychology takes a very differentiated approach to the ideational realization of increasingly complex structures of reality through the individual age groups, starting from simple sensual, spatial and later on also temporal and eventually abstract perceptions (Piaget, 1973). In children, this process takes place in a state of extreme alertness and with their consciousness very much present. They are not yet surrounded by a ready-made world and still have the alert presence of consciousness that enables them to access the world and its relationships. Adults can often be surprised by a child's unusual but extremely productive view of reality. In a well-known scene in Wolfram von Eschenbach's 'Parzival', an epic characterized by its very subtle way of illuminating different processes of consciousness, the author describes how, in the isolated forest of Soltane, the young Parzival has his very first encounter with a knight. Earlier, he had asked his mother about the true nature of God and she had replied: 'He is brighter than daylight; he who took on a human face.' Parzival thinks that the knights in their gleaming armor are gods. He asks one of them who then explained they were knights: "But Knight God, what might you be? You have so many finger rings around your body; up there and down here!' The boy's hands touched anything ironclad he could spy. He looked upon the knight's armor. 'My mother's maidens wear their rings on strings where they don't touch one another." Parzival has never before seen a coat of mail and now tries to connect the new with what he already knows. This shows that understanding means to fit the newly understood into known contexts. Parzival continues: "What is it good for, which looks so pretty on you? I can't pinch it off." The knight pointed at his sword. "Look, if someone seeks to quarrel with me, I'll fend off his blows with this. Against his blows I wear those rings around my body, and my armor serves to protect me against shots and stabs." Parzival understands and again relates it to what he already knows: 'The boy replies quickly: "If deer had hides like this my spear couldn't harm them. I've killed quite a few of them." (Stapel, 1984, ibd.) - This scene illustrates quite beautifully a child's original process of understanding, i.e. to employ a very skillful and original intelligence to connect the hitherto unknown with the familiar.

In his above-mentioned lecture, Rudolf Steiner stresses that an important aspect of education is not to work with ready-made conclusions but to provide students with the opportunity to independently experience, interpret and fit in the world around them. What is needed is not fixed perceptions but opportunities for experiencing fully consciously in order to give students the power of understanding to unlock and connect. If, on the other hand, the teacher presents to the students his or her own fixed perception in a prescriptive manner, the power of unlocking reality, which must be harnessed if teaching is to be filled with life, all but drains away. In addition to the special pedagogical attitude of consciousness demanded from the teacher, i.e. that they do not let their own fixed perceptions dominate but approach

^{4.} The extraordinarily complex achievements of learning in early childhood are illuminated interestingly in brain research and discussed in a pedagogically relevant context. Cf. Gerald Hüther (2005; 2006); Manfred Spitzer (2007).

^{5.} This and the following quotations from the prose version of the Parzival epic by Wilhelm Stapel, (1984), p. 66f.

reality with curiosity, interest and an openness for new experiences - references that can be found in many of Steiner's lectures - Waldorf education has a number of concrete examples that take account of this modified or childlike-natural attitude of consciousness toward reality:

- In his book *The Education of the Child in the Light of Anthroposophy* (2002), Steiner discusses the choice of toys for children. He stresses that children should not be given perfect toys but incomplete and improvised ones preferably fashioned from natural materials ensuring a diverse sensual development so as to stimulate their imagination and to avoid a one-dimensional fixation of their perception. The deliberately restrictive dealing with media technology in Waldorf education follows the same reasoning (Hübner, 2005). Electronic media, e.g. television and personal computers, can merely convey an aspect of reality and are very limited in their power to encourage productive engagement, and where this is achieved, it can only take place by way of the perceptions transported by those media. This engenders a more receptive attitude. However, there is no question that children and adolescents taught at Waldorf schools have to learn to engage with electronic media in a productive and critical manner, a necessity that can sometimes fall victim to an overly restrictive approach by the teacher.
- The tradition of Waldorf schools to do without conventional school books, especially at elementary school level, also follows this theme. The reason being that 'ready-made' school books, too, can only convey a world that has already been explored, interpreted and represented in perceptions. But this is not what the child needs. Rather, the composing of main-lesson books, as is common practice in Waldorf schools, is designed to let the students themselves document the formation of their own learning and understanding. The fact that many such main-lesson books are filled with texts copied from the blackboard or dictated by the teacher runs contrary to the original intention. Also, limited use of school books does not mean that no books are used at all. To the contrary: they are another media students need to engage with critically and utilize productively for their own learning progress. This aspect is frequently neglected at Waldorf schools leading to considerable problems, especially at high-school level.
- Another example, albeit one not confined to Waldorf education, is the teaching and learning of spelling. In many instances, German spelling is not obvious from the way the language is spoken as it is based on historically grown conventions. A phenomenon that even the recent spelling reform did not remedy. When students at elementary school level learn to write and, out of an alert intelligence infer the way they spell from the spoken language they hear, their spelling is frequently wrong by conventional standards. Nonetheless, based on the students' understanding and transference of the language at that early age, it is an extraordinarily intelligent implementation to translate spoken words into a written language solely based on hearing. Hence, even though their spelling does not follow conventional rules, it is not wrong. This situation calls for very delicate handling on the part of the teacher. Rather than pointing out the student's 'mistakes' as this would result in his or her loss of trust in their own genuine power of understanding the teacher should encourage them to continue this process of understanding, empowering them to possibly comprehend the established way of spelling by unlocking it. It is paramount at elementary school level and throughout schooling altogether for children and adolescents to employ their own power of understanding in a genuine and productive way, and to learn to trust it.
- In Waldorf schools, this is achieved by a very accentuated experience relatedness which is brought to bear by the teaching of arts and crafts. Because they initially take shape in a disjointed fashion, experiences in an epistemological sense provide an opportunity for the perceiving consciousness to test its individual, coherence-promoting power. This engenders perceptions which, in light of new experiences, are open to expansion or adjustment by reality. In this context, Waldorf education firmly aims to provide a productive consciousness environment which would be less likely to thrive under a more prescriptive form of teaching. Certainly one point is not to subject children's perception to negative adjustment, which can be a tall order for adults. All too often do we as adults intervene in children's active, playful learning by making negative adjustments or corrections through pointing out mistakes or dangers. For example, a child climbs a tree. Watching from below, an adult might say: 'Watch out you don't fall down!' Obviously, that had not been the child's intention. It would have been more helpful to say: 'Put your foot on this or that branch,' or a similarly positive suggestion. The idea is to avoid, or at least critically reflect upon, intermittent interventions on the part of the adult that dominantly convey their fixed perceptions. This approach is also a key feature of Montessori education. Maria Montessori observed the extraordinarily strong impact of the autonomous intelligence in children's learning and developed her education based on the intuition of this self-generating childhood learning. (Montessori, 1992; 1993)

Judgment

Continuing in his above referenced lecture, Rudolf Steiner moves on to the concept of *judgment*. This he conceives of as an attribution within the meaning of the established theory of judgment. A *judgment* expresses a quality that is of significant relevance in Waldorf education. More specifically, forming a judgment is a highly individual and personal process we are constantly involved in. It is a way to assess, evaluate and form a qualitative judgment that we, as individuals, perform and that is important for all our decisions, even down to the most trifling everyday situation. If, for example, we look at the statement 'the large garden' or 'the garden is large', this is, in the first instance, a *relative* statement which depends on our personal conditions of life, i.e. the kind of cultural-biographical perceptions we have formed in the course of our lives. And yet, with regard to our own position in life, the statement is *absolute* because the judgments we make are valid for us as individuals. They form the basis for our decisions. We act on our judgments, which can comprise very complex contexts. Some of those are judgments we expect to rely upon in certain life situations and which tincture our lives, e.g. 'that person is honest', 'that person is reliable', 'that ice is strong enough', 'that car

is working', etc. Those are judgments we need to give us a sense of security in life. They will be colored by our entire personal, cultural, sociological and historical existence. In a sense, they define our position in civilized life. In addition, those judgments are also always linked to decisions. This is frequently not taken into consideration. Especially with regard to the development of scientific thinking, the view entrenched in the mind of society as represented by schooling and the media, but not normally borne out in epistemological terms, is that of the absolute objectivity of science. The reason for this being that scientific thinking refers to mathematics as its basic science. Whatever can be measured, counted or weighed – and herein lies the decision - becomes the sole object of scientific research. Everything else is excluded, occasionally in a manner not unlike that of religious dogmas preceding the prevalence of scientific thinking. Most notably, it was Paul Feyerabend who drew attention to this kind of 'scientific dogmatism' and called for a pluralism of theories and methods (Feyerabend, 1975). This highlights how, ultimately, even highly complex and argumentatively differentiated scientific positions are founded on *judgment-based decisions* which, in this case, are made on a socio-cultural basis to become defining for our civilization.

What significance does this have for education? An aspect of developmental psychology advocated by Waldorf education is based on the conviction that it is not until puberty that children and adolescents reach the maturity to form their own judgments. Only then will they be able to make independent judgments. Before puberty, they tend to accept judgments conveyed to them by others around them, either verbally or through the behavior of those others, and follow them. At that age, imitation is key, and the concept of authority, one frequently emphasized in Waldorf education, is brought to bear. Before puberty, children and adolescents adopt judgments that are lived by those around them in much the same absolute manner as those who initially formed those judgments. The power of the personality at work in every judgment directly transfers to children and adolescents. While this may sound radical - after all, a clear distancing from authority can be observed in children as young as eight to ten years old - but merely reflects the experience in the classroom. Any verbal distancing of a child from an adult, which often occurs at that age, is more likely to be the expression of disinclination rather than an independent act of judgment. An interesting observation for the education practitioner is the fact that grade 3 and 4 students tend to be very impressed by older students, e.g. from grade 8 or 9. Whatever those older students represent in terms of their appearance and demeanor is adapted by their younger schoolmates almost immediately. The significant influence of anything from the music and sports culture conveyed by the media to dress and behavioral rituals can also be explained by the adopting of judgments and values typical of prepubescent behavior. - As Rudolf Steiner points out in the aforementioned lecture, this carries a significant degree of responsibility on the part of the teacher in terms of his or her judgment forming. Because an adult by a child is perceived as an authority in judgment he or she must be able to explain their own judgments transparently. This is because it is not the verbal judgment as such but the power of one's own grounds for a given judgment that is at work in education. If, in this context, an educational practitioner acts non-reflectively, unconsciously or inconsistently, his or her students will be unable to develop an assuredness in life that would otherwise be derived from the forming of judgments and values.

In puberty, this relationship undergoes a transformation. As adolescents, students now feel the power to form judgments autonomously. Initially, they exercise this by distancing themselves from the surrounding adult world in order to strengthen their sense of self-affirmation. At that age, young people develop their own *tastes* in relation to all aspects of their lives: dress, music, the choice of friends, their own behavior, etc. Experiencing one's own individual forming of judgment is the very key experience of puberty itself. An interesting phenomenon in students of grade 9 or 10 is that they sometimes form very idealistic judgments, which will relate to their environment rather than their own selves. From their teacher and from others in general, they expect and demand *honesty, reliance, justice*, etc. with an absolute certainty in their judgments and values. Those values become their benchmark for the integrity of the adult world.

In pedagogical terms, it is now important for the student to learn *how* valid judgments are formed. They can now access the *power* that creates judgments. What does this mean? For individuals of this age group, judgments that are not adopted from an authority are formed on the basis of experience and insight. Experiencing how specific behavior has a specific effect leads to either the confirmation or the alteration of that behavior. As a complementing force, thought-based insights help to verify the validity of judgments. These insights are founded on a trust in the students' own thinking which they will have developed in the classroom.⁶ However, what is often more important than a theoretical-argumentative reason which may be used to justify a judgment is their own personal, practical life reasoning. The aim is for adolescents to attain the ability to form judgments and values that are sustainable - hold water as it were - for their own lives. In order not to *fall flat*, judgments must stand the test both of time and of the person who represents them. In this context, German main lessons can play a vital part in conveying judgments and values. - Taking Lessing's play 'Nathan the Wise' as an example, where the author describes how an inadequate and prejudiced judgment is formed that has an impact on society. Judgments actually represent power which, despite their lacking in truth or validity, is exploited by individual groups against the interests of society. In this sense, *anti-Semitism* has been used for centuries. With his character *Nathan*, Lessing portrays a Jew who is confronted with the anti-Semitic prejudices - that existed both historically and in

^{6.} In this context, logic-based, scientific teaching subjects such as mathematics and physics have special significance for the development of personality.

Lessing's day - and who, on closer inspection, disproves each and every one of them in thought and in deed. *Nathan* convincingly champions a sense of tolerance toward other beliefs and cultures. However, in a dialog with the *Templar*, a representative of the Christian faith, it is this very ideal of tolerance of *Nathan's* that is being questioned. The *Templar* calls *Nathan* a *Jew wolf in his sheep's clothing of philosophy,*⁷ thereby questioning the integrity of *Nathan's* ideals. The reader of the play will eventually learn that not only does *Nathan* advocate verbally his ideal of tolerance as his philosophical creed, but that this ideal is his very way of life, even in the face of suffering. *Nathan* practices his ideal of tolerance even after his family is wiped out by Christian crusaders. – It is a key educational objective for adolescent students of main lesson German to learn by the example of 'Nathan the Wise' that the formation of ideal values is not exhausted simply by putting them into words. Rather, those values must be able to stand the test of our actions in life.

There is another example which also relates to the classroom discussion of 'Nathan the Wise'. In grade 11, the subject of biographies forms part of the curriculum. Following appropriate preparation, the students are tasked, inter alia, with writing a biography of someone who is over 50 years old, i.e. an older person from their perspective. Ideally, they are to choose someone they do not know very well but yet find of interest, and interview them. In doing so, they are to focus on asking what hopes, goals, and ideals that person had in his or her youth, and try to comprehend how the *life reasons* in an individual's life change and transform over time. It is important for the students to experience that, while a large part of the human biography is shaped by the circumstances they live in and experiences they make, it is of equal significance whether they manage to build a foundation for forming their own judgments and values to lead them through life.

As previously mentioned, judgments are more than mere intellectual evaluations of facts and circumstances. They form the personal basis of an individual's existence. It is therefore paramount for the education of children and adolescents that they are given the opportunity to experience, by the example and authority of adults, the formation of judgments that are valid, individually sustainable and stand the test of life. This is to provide them with a source of strength for their personality so that, on reaching puberty, they learn to develop their own reliable core of personality.

Concept

In the theory of judgment, the *concept*, in the sense of an imagining conceiving of a fact, traditionally comes first. Yet Steiner, in his above-mentioned lecture, puts it last, albeit with a different connotation. In his meaning, *concept* is, in the first instance, not the perception the observer conceives of a thing but the laws that are at work in the things. Thus, Waldorf education takes up a position that is decidedly concept and idea-realistic in terms of the familiar universals debate of medieval scholasticism. As indicated by the above examples of the watch and the car engine, it assumes philosophically that concepts are at work as ontological entities in the things around us. Goethe encapsulates this idea in his poem 'Legacy' (Goethe, 1988, p. 685) which he penned in later life:

No being can dissolve to nothing! The eternal lives on in everything, Let being sustain your happiness! Being is eternal: for laws Preserve the living treasures, With which the cosmos adorns itself.

The perspective of a world that is all-creatively pervaded with intrinsic eternal forces is in sharp contrast to the scientific world view commonly held today which, ultimately, represents a random evolution that emerged from destructive forces. This differing world view is at the root of allegations, often leveled at Waldorf education, of ideological dogmatisms removed from scientific fact and clinging to an obsolete conception of the world. These allegations can be justified as frequent examples documented by empirical evidence can be found (Barz & Randoll, 2007) of individual Waldorf teachers non-reflectively presenting a fixed view of the world in the classroom. However, this does not represent the core concerns of Waldorf education. Its aim is not the dissemination of an ideology dressed up as didactics. Rather, it is to convey *reverence* and *respect* for the mysteriousness and undisclosedness of existence and creation which would elude the straitjacket of purely scientific-materialistic thinking. A fact also conceded by many of the 20th century's great scientists, e.g. Heisenberg, Einstein, von Weizsäcker, who played a key role in shaping the scientific world view.

^{7.} Gotthold Ephraim Lessing (1988): Nathan der Weise. Act 4, Scene 4, l. 2780f.

The philosophical stance of Waldorf education can be compared to Goethe's approach to research. Even though, as is expressed in his following poem, a main feature of Goethe's personality is reverent respect for an intrinsic creation, he never approached his own scientific research in a presumptuous or prejudiced manner. To the contrary: he viewed his own efforts made and results achieved in the field of research only ever as humble steps toward the revelation of the great mystery that is *nature*. He writes in his preface to *Theory of Colors*:

It is useless to attempt to express the nature of a thing abstractedly. Effects we can perceive, and a complete history of those effects would, in fact, sufficiently define the nature of the thing itself. (Goethe, 1975, p. 315)

Thus, it is not about presumptuous ideological positioning but respect for the greatness and undisclosedness of the object of research. Neither from an epistemologically ethical nor commonly human standpoint, nor indeed from an educational one is there a place for making hubristical declarations of knowledge with absolute certainty. However, this does not mean that children and adolescents in the classroom should be deprived of the perspective of an eternal existence which they need to explore and appreciate for themselves. Hartmut von Hentig once described this perspective as follows. He specifies, in compact language, six criteria against which educational process and schooling must be measured:

Firstly, abhorrence of and resistance against inhumanity;
Secondly, the ability to perceive happiness;
Thirdly, the ability and the will to communicate;
Fourthly, an awareness of the historicity of one's own existence;
Fifthly, the willingness to question apparent certainties;
Sixthly, the willingness to take responsibility for oneself and within the res publica.
(v. Hentig, 1996, p. 122)

As a goal for an educational process in Waldorf schools, Hartmut von Hentig's fifth criterion, the willingness to question apparent certainties, comes to fruition in a number of methodological steps. In this context, a key aspect is the esthetic design and appearance of the school and its classrooms. This is an expression of respect and care in dealing with the phenomenal world. In addition, Waldorf schools teach natural history in a way that does not merely convey theoretical concepts of natural phenomena but, e.g. in horticulture lessons, creates an intensive and appropriate framework for practical activity and experience for the students. Another important aspect of Waldorf education is that teaching is not confined to the classroom but, by organizing practical projects and internships, aims to include a wide variety of practical, real-life experiences.

Also, Rudolf Steiner's many references in his educational lectures to the significance of presenting elementary school-age children with images and phenomena rather than ready-made definitions. In fact, he recommends that children of that age group are not to be exposed to purely definitional knowledge. In his above-mentioned lecture he says:

What kind of a concept should we then give the children? It must be a living concept if man has to live with it. [...] You must give the child such concepts as are capable of change in his later life. [...] And when is it that you give him dead concepts? When you continually give the child definitions [...] and make him learn it by heart, then you are grafting dead concepts into him. The making of many definitions is death to living teaching. [...] In teaching we must not make definitions but rather must endeavor to make characterizations. We characterize things when we view them from as many standpoints as possible. (Steiner, 2005, p. 159)

Hence, the appropriate approach to teaching is a vivid, multi-perspective and phenomenological one. However, it must take account of the different ages of students. It is equally important that, at high-school level, students also learn to handle abstract, definitional concepts intellectually. But even at that age, teaching should be colored with the sentiment that such rather definitional concepts are not the be-all and end-all but merely represent a facet, e.g. their mathematical calculability. A consciously structured variety of methods in high-school level teaching is to help the students develop an open and inquisitive attitude toward a given subject. It is this attitude that encourages *questioning certainties*.

The emphasis of what has been discussed so far may give the impression that the primary objective of Waldorf education is to avoid fixed and well-structured concepts. This is not the case as it would cause confusion rather than consolidate the students' knowledge. There is no doubt that knowledge content must be taught in a clear, accessible and structured form. This is a key objective of classroom teaching. At the same time, care must be taken not to create the epistemologically naive attitude expressed in the well-known quotation from Goethe's Faust: 'That one can take back home, and use, what someone's penned in black and white'. That is why, in methodological terms, Waldorf school lessons do not conclude in a definitional recap of the covered topics. Instead, this takes place on the following day when the students will have had time to experience for themselves the phenomena originally only presented to them in the classroom. This is to ensure that the references to the real world in respective teaching results become and remain accessible. At this level, a *concept* is not regarded as the ontologically eternal aspect of a given phenomenon - as which it cannot be grasped by the thinking mind as Goethe understands it - but as an involvement that is tentative, conscious of its preliminarity and insufficiencies, and yet questing and exploring.

Summary

The present study was based on the thesis that the act or process of understanding on the part of the student represents a vital criterion of the quality of classroom teaching. Against this backdrop, individual methodological aspects of understanding were explained. It became apparent that understanding is not a primarily receptive process but a productive act of integrating the subject and the object, the self and the world in a coherent context. *Conclusion*, *judgment* and *concept* were developed as the three forms of the implementation of understanding.

- Conclusion: The active unlocking of an aspect of the world and the connecting of it with one's own, previously established, continuum of understanding and meaning. The aspect of understanding that becomes relevant in this context can be called interpretive understanding, where the dynamic of understanding developed in the classroom is to be construed in the sense of the world relating to man.
- *Judgment*: The personally represented, life-tested attribution of a fact gained by experience and insight. This aspect of understanding, which is brought to bear in the judgment, can be termed *self-understanding*. The educational encouragement of this understanding in a classroom situation is based on a relationship *man relating to man*. From their teacher, students learn about the power of forming valid judgments and values and how to embed that power, as individuals, in their own existence.
- Concept: The world-pervading, all-creative law which does not comprise the human approach to knowledge but which is the focus of it by way of evolving conceptual methods of exploration. The aspect of understanding this addresses can be called world understanding. The activity of understanding is engendered by relating the self to the world.

The three aspects of understanding require corresponding educational skills of the teacher:

- The exploring of the world based on interpretive understanding in the context of one's own continuum of understanding requires *methodological skills* of the teacher enabling him or her to encourage processes of individual understanding.
- Judgment forming is person-based and generates self-understanding. It demands individual and social skills of the teacher in order to create in the student an openness for trust and communication which makes possible to learn of and from man.
- The world-understanding, living conceptualization which explores a given law-based relationship backed by the certainty of a method of knowledge demands of the teacher *subject matter competence* suited to plant in the student a curiosity, an enthusiasm and a confidence to pursue scientific exploration.

The following chart is to summarize the reasoning outlined above:

| Form of Understanding | Direction of Understanding | Aspect of Understanding | Skills required of the Teacher |
|-----------------------|----------------------------|-------------------------------|--------------------------------|
| Conclusion | World → Man | Interpretive Understanding | Methodological Skills |
| Judgment | Man ↔ Man | Self Understanding | Individual and Social Skills |
| Concept | Man → World | World Understanding | Professional Skills |

References

Antonovsky A. (1997). Salutognese. Zur Entmystifizierung der Gesundheit. Tübingen: Deutsche Gesellschaft für Verhaltenstherapie. Deutsches PISA-Konsortium (2002). Die Länder der Bundesrepublik im Vergleich. Opladen: VS Verlag.

Baillet, D. (1983). Freinet - praktisch. Weinheim: Beltz.

Barz, H. & Randoll, D. (2007) (Eds.). Absolventen von Waldorfschulen. Eine empirische Studie zu Bildung und Lebensgestaltung. Wiesbaden: VS Verlag.

Eschenbach, W., Stapel, & W. v. (1984) (Eds.). Parzival. München: Langen Müller.

Feyerabend P. (1975). Wider den Methodenzwang. Frankfurt / M.: Suhrkamp Taschenbuch.

Freinet, C. (1981). Praxis der Freinet-Pädagogik. Bearbeitet von H. Jörg. Paderborn: Schöningh.

Glasersfeld, E. v. (1996). Radikaler Konstruktivismus. Frankfurt / M.: Suhrkamp.

Goethe, J. W. v. (1975). Dichtungen. In Trunz, E. (Ed.), Goethes Werke. Band XIII. München: C. H. Beck.

Goethe J. W. v. (1988). Sämtliche Werke. Briefe, Tagebücher und Gespräche. Band II. (Hrsg. von Karl Eibl). Frankfurt: Deutscher Klassiker Verlag.

Helmke, A. (2007). Unterrichtsqualität erfassen, bewerten, verbessern. Stuttgart: Kallmeyer.

Hentig, H. v. (1996). Bildung. Ein Essay. München, Wien: Hanser.

Hübner, E. (2005). Anthropologische Medienerziehung. Frankfurt a. M.: Peter Lang.

Hüther, G. (2006). Bedienungsanleitung für ein menschliches Gehirn. Göttingen: Vandenhoeck & Ruprecht.

Hüther, G. (2005). Das Geheimnis der ersten neun Monate. Düsseldorf: Walter Verlag.

Kant, I. (1974). Kritik der reinen Vernunft. In Wilhelm Weischedel (Ed.), Werkausgabe, Band III. Frankfurt: Suhrkamp.

Kuhn, T. (1976). Die Struktur wissenschaftlicher Revolutionen. Frankfurt a. M.: Suhrkamp.

Lessing, G. E. (1998). Nathan der Weise. Stuttgtart: Reclam.

Montessori, M. (1993). Kinder sind anders. München: Deutscher Taschenbuch Verlag.

Oswald, P., Schulz-Benesch, G. (1992) (Eds.). Grundgedanken der Montessori-Pädagogik. Aus Montessoris Schrifttum und MWirkkreis. Freiburg: Herder.

Piaget, J. (1973). Einführung in die genetische Erkenntnistheorie. Frankfurt a. M.: Suhrkamp.

Prange, K. (2000). Erziehung zur Anthroposophie. Darstellung und Kritik der Waldorfpädagogik. Bad Heilbrunn: Klinkhardt.

Schneider, P. (1982). Waldorfpädagogik. Erkenntniswissenschaftliche und anthropologische Grundlagen. Stuttgart: Klett-Cotta.

Spitzer, M. (2006). Lernen: Gehirnforschung und die Schule des Lebens. München, Heidelberg: Spektrum Akademischer Verlag.

Leber, S. (2002). Kommentar zu Rudolf Steiners Vorträgen über die Allgemeine Menschenkunde als Grundlage der Pädagogik. Band II. Stuttgart: Freies Geistesleben.

Steiner, R. (2005). Allgemeine Menschenkunde als Grundlage der Pädagogik. Dornach: Rudolf Steiner Verlag.

Steiner, R. (1907; 2002). Die Erziehung des Kindes vom Gesichtspunkt der Geisteswissenschaft. Dornach: Rudolf Steiner Verlag.

Steiner, R. (1930). Die praktische Ausbildung des Denkens. Dornach: Philosophisch-Anthroposophischer Verlag.

Ullrich, H. (1986). Waldorfpädagogik und okkulte Weltanschauung. Weinheim, München: Juventa Verlag.