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Title: Edusemiotics of meaningful learning experience : Revisiting Kant's pedagogical

paradox and Greimas' semiotic square

Year: 2016

Version:

Please cite the original version:

Kukkola, J. E., & Pikkarainen, E. (2016). Edusemiotics of meaningful learning experience: Revisiting Kant's pedagogical paradox and Greimas' semiotic square. Semiotica, 2016(212), 199-217. https://doi.org/10.1515/sem-2016-0124

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Edusemiotics of meaningful learning experience: Revisiting Kant's pedagogical paradox and Greimas' semiotic square

DOI 10.1515/sem-2016-0124

Abstract: In this article we examine the educational process and learning from the edusemiotic point of view in terms of meaningful experience and meaningful action. A conception of meaningful experience is central in many branches of educational thinking, from pragmatism to existentialism. We analyze this conception from two traditional and somewhat remote perspectives, utilizing some themes of Kant's educational philosophy on the one hand and Greimas' semiotics on the other. Kant's views of human formative powers – Bildung – will be described as a basic philosophy of learning experience. Kant's theory is then critiqued from the perspective of existentialist educational philosophy. Concepts of meaningful learning and experience are further clarified utilizing Greimas' semiotic tools and, specifically, his semiotic square. Finally, the question of meaningful learning experience is related to Kant's pedagogical paradox and the educator's role in the pedagogical process.

Keywords: Bildung, existential pedagogy, meaningful experience, Greimas, Kant, learning

1 Introduction

The idea of meaningful experience is central in many branches of educational thinking, from pragmatism to existentialism. It is especially important in edusemiotics, a new transdisciplinary theoretical research area that brings together philosophy of education and theoretical semiotics (Semetsky and Stables 2014; Stables and Semetsky 2015). Edusemiotics entails many kinds of theoretical frameworks and developments. Pragmatism in its Peircean and Deweyan forms has been an important starting point for many researchers in edusemiotics. Experience is an extremely seminal concept in Dewey's philosophy. However, in this article, we will try to utilize several somewhat less covered theoretical

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resources. The main basis for our educational thinking is the action theoretical tradition as represented in the Continental philosophy of education that leans on the concept of formation or *Bildung* (e.g., Benner 1996; Mollenhauer 2013).

The concept of *Bildung* has been pervasive in Continental (and especially German-speaking) pedagogical thinking and practice from at least the eighteenth century onwards. There have been some contemporary German debates about the usefulness of this concept, and also a growing interest in it in the English-speaking discussions in the area of educational theory (e.g., Biesta 2002; Siljander et al. 2012). The most important and peculiar feature about the concept of *Bildung* is that there is no strict and commonly held definition of its content; another problem is that there is no proper translation of it in English. There are many possible translations, of which some of the most fruitful include 'formation,' 'growth,' and 'culture.' All of them stress one particular side of the concept while ruling out other important nuances, and this risks both possible misunderstandings and limited theoretical capabilities in its philosophical use. Etymologically the root of the term is Bild - 'image' (Lichtenstein 1971) - so as a verb it could be 'imaging.' In this regard, one should also keep in mind the Kantian terms 'representation' and 'imagination.' Considering the meaning of the concept, Bildung is first of all a developmental process that concerns the changes of the human subject as its growth and self-formation. Secondly, it is always about the relationship between the subject and the world, or between the subject and other subjects. Thirdly, there is the activity of the subject who is not only a passive victim of his or her environment but also forms his or her worldly conditions, actively and creatively forming himself or herself anew at the same time.

Bildung in this way partakes of the pragmatist concept of "experience." Famously, Dewey defined experience as the active-passive interaction between the subject and environment. However, there is an important difference. In addition to the previously described processual aspect of Bildung, there is always some kind of ideal or normative side to it. Bildung is not a neutral phenomenon but entails an active evaluation of the realities in which subjects live and the norms by which they live. In this sense, Bildung is not only an attribute of culture but comes close to the critique of culture. Bildung has been traditionally understood as an ideal for human growth. Different thinkers have naturally given different contents to this ideal goal. The modern secularized notion of Bildung appears to be more or less open-ended, yet in some way natural, so that the nature of human beings and human culture would show some necessary directions for it. In this respect, we will analyze Kant's philosophical thoughts of Bildung, which have inevitably been fundamental for later pedagogical thinking.

Kant's thinking about experience and its formative character is versatile and groundbreaking. Nevertheless, there seem to be at least two problems to it. Firstly, it is somewhat cognitivist or rationalist. Secondly, the formation is understood as solely self-formation, even though there is some social aspect to experience; action as the formation of environment seems to be absent in Kant. The first problem has been strongly critiqued in existential and phenomenological philosophy. Even though Kant binds Bildung to the growth of human freedom, existentialist critics see freedom in a much more radical way – perhaps also as a freedom from rationality. Combining existential philosophy with the theory of education is not entirely unproblematic. As can be easily seen from the history of existentialism and also from existential semiotics (Tarasti 2012; Kukkola and Pikkarainen in press), the concept of Bildung is either implicitly or explicitly very centrally thematic to this thought model. Sartre's existentialism in particular can be seen as kind of radicalization of *Bildung* theory, but at the same time as Bildung (i. e., an autonomous and authentic becoming of oneself) is stressed, the educational influence (as the other side of the paradoxical nature of education) will become neglected or forgotten. As an example of a reasonably moderate existential educationalist, we will consider Otto Friedrich Bollnow (1907–1991), who is famous for trying to utilize certain themes of existential philosophy in the prevailing context of hermeneutic pedagogy, where the role of the pedagogically influential "other" plays a significant role in the dialogical relationships between the teacher and the student, culture and the individual, and reproduction and transformation.

The second problem of Kant – the omission of the world-forming action – has been more or less explicitly criticized in, for example, Hegel's philosophy and, later, in pragmatism. We will not consider these criticisms here, but traverse to Greimas' semiotic theory of action, which will help to explicitly define what meaningful experience is. We will relate the concept of meaning to the context of action, so that it is considered a relation or effect of something on the action of the subject. A basic model of human action will be developed from the elementary idea of active-passive experience. We will see how meaning develops from simple binary of good or bad to multivalent alternatives, which can be analyzed by means of the Greimassian semiotic square. It will be shown that experience as such, however meaningful or critical, is not yet Bildung or even learning, but that learning takes place only after the subject has changed his or her action and that new action has changed his or her competences.

In the end, we will go to the core question of educational theory, the famous Kantian paradox of education. According to this, in education we try to cultivate the learner's human freedom, but in practice we often cause (and in principle always compel) the learner to do something he or she would not have done autonomously.

How can this controversy between freedom and coercion can be settled? The analysis of this problem requires, first, considering once again the contents of the idea of *Bildung*, and second, examining the roles of educator and learner with the help of the Greimassian actant model and utilizing the modal categories in learning.

2 Kant and the formative powers in human experience

As has been pointed out, the notion of 'formation' - or Bildung - is a pervasive view in the European philosophy of education. According to the German Romantics, the concept refers to an inner unfolding of a person, while the thinkers of the German Enlightenment interpreted it as the realization of one's self-understanding and autonomy. Bildung is therefore a developmental process that aims for certain outcomes. There is also a particular reciprocal interrelationship of world and individual at play, one of world-disclosure (Stojanov 2006). In the era of the early Enlightenment, Immanuel Kant was especially vocal about seeing Bildung in connection with the development of reason and, through it, as emancipation from a self-caused adolescence. Bildung is thus mostly selfdevelopment. For the purposes of our focus on learning experience, what is especially interesting is that, for Kant, Bildung is not only connected to selfeducation or human autonomy, but to human experience in the first place. Already, in Kant's pre-critical early work, the experiences themselves are construed by formative functions. These representational functions of sense are modes of Bildung. Later, in his magnum opus Critique of Pure Reason, Bildung becomes the most pervasive feature of all modes of intuiting and imagining.

In his early work, Kant makes it clear that the formative faculty is active in perceptual as well as imaginative processes, i.e., in relation either to given or non-given objects (Makkreel 1990: 12). When the 'formative faculty' -Bildungsvermögen - is used only in relation to given objects it is called Bildungskraft, which is the power to coordinate or give form to intuition (organized sensual content). When used in relation to non-given objects, it is called Einbildung or the power of 'imaginative formation.' In addition to Bildungskraft and Einbildung, Kant mentions several other modes of Bildung. Abbildung is 'direct image formation,' the formation of raw sensual data. Nachbildung is 'reproductive image formation,' or construing a past image from memory, and Vorbildung means 'anticipatory image formation' or imagining future experiences. There are two more modes of Bildung, and they are not temporally definable (Makkreel 1990: 13). Ausbildung is that mode of formation that completes images, and Gegenbildung is that which allows images to serve as linguistic signifiers or symbolic analogues for something else. The latter mode represents semiotic functions in the experience. Kant develops his philosophy of experience and *Bildung* further in the first Critique.

In the chapter "Transcendental aesthetics" of Critique of Pure Reason, Kant establishes his view about human experience in which a unity is formed of the manifold of sensible data by organizing that sense data a priori. Experience is active in the sense that it contains passive reception of sensual content that needs to be actively organized by the pure concepts, that is, the cognitive capacities the experiencer has that are not themselves given in sense data. Perception is never merely sensual nor is the source of our experience only in reason. In the Critique, Kant also emphasizes that sensibility, or "intuition," is that "representation that can be given prior to all thinking" (Kant 1974: B132). The reason that intuition can be given prior to thinking is that it is by nature independent of conceptual representation. In the "Transcendental aesthetics," Kant not only makes clear that "intuition" is that "representation... which can only be given through a single object" (Kant 1974: A32/B47), but that we also must "think of every concept as a representation that is contained in an infinite set of different possible representations (as their common mark), which thus contains these under itself." Since intuition as a single representation contains representations "within itself," it is intrinsically different from concept such as universal representation (Kant 1974: A25/B39-40). As intuition differs from fixed a priori concepts of cognition, experiencing is a productive endeavor in conjunction with two different sources of experience. This activity is formed by subjective formative powers that are a reminder of the powers in his early pre-critical work.

For Kant, intuition – or sensibility – and conception are not enough in and of themselves for coherent experience; sensible data need to be brought together in what he calls "original synthetic unity of apperception." The unity of apperception is the "place" where all the contents of our senses, e.g., what we see and hear, are brought together so that we know that they refer to the same object in our experience. Our pure and general concepts about our perceptual contents cannot help us distinguish those contents unless these perceptual data are already combined in the apperception. In the "A Deduction" section in the first edition of the Critique, Kant establishes that the power that brings sensibility together is "imagination." The manifold of appearances that sensibility gives us is brought together in a necessary unity, and the task of this synthesis is what Kant calls "the transcendental function of imagination" (Kant 1974: A123).

Imagination is not the only one of Kant's syntheses in "Subjective Deduction." There are other ways of unifying sense-contents per se, and Kant speaks of three of them. The synthesis of apprehension makes it possible to bring together many impressions into one sequential manifold by relating them to the time continuum as the form of inner sense. Imagination also reproduces a transcendental synthesis whereby the imagination can associate past representations with the present on the basis of a priori principles. Lastly, the synthesis of recognition brings in the sameness of representations through time and unity among different representations. These formative powers of the perceiving subject make it possible to see different appearances as being about one representation, reproducing past representations at a given time, and recognizing that the representation a minute ago was the same as the one that someone is seeing currently.

Imagination also plays its role in organizing sense data by human conceptual faculties, or what Kant refers to as "Objective Deduction." According to Kant's position in the later "B Deduction" section of the second edition of the Critique, all synthesis is ultimately a function of the understanding and its categories. In the second edition, the idea of "Subjective Deduction" is dropped so that the understanding and its categories can be given a fundamental role from the beginning (Makkreel 1990: 28). The central function of the imagination that is disclosed in the "Objective Deduction" is productive in the sense that it mediates between the understanding and sense to apply the transcendental unity of consciousness to "all objects of possible experience" (Kant 1974: A118). Although the second edition, with its "Objective Deduction," lessens the role of imagination in active perception as compared to the first edition, it is still clear that imagination plays an important formative (Bildung) role bringing conceptuality and sensibility together.

From Kant, it becomes clear that human formation in its educational sense is directly linked to human experience and its structures. A meaningful learning experience not only requires an educational grounding, but grounding in the philosophy of experience itself that is linked to it. Kant's influence in this respect has been vast, but his view has also been challenged. Before we go into more detail with regard to Kant's philosophy of education, we will look at how his philosophy of formative experience has been critically examined. The philosophies of existentialism and phenomenology become especially interesting here.

3 Meaningful learning experience in existential-hermeneutic philosophy of education

In particular, existential phenomenologists such as Martin Heidegger and Jean-Paul Sartre can be seen as radicalizing the notion of Bildung. Whereas Kant stresses the subjective formative powers, existentialists focus on the worldly powers that cannot but influence us and form us into what we are. When Kant's notion of Bildung, i.e., autonomous and authentic becoming to oneself, is in focus, the educational influence as the other aspect of the paradoxical nature of education is neglected or even forgotten. The most vocal influence of this kind to educational theory has come from Existential-Hermeneutic Pedagogy, with Otto-Friedrich Bollnow as its prominent figure.

Bollnow's basic understanding of education is based on a humanistic, hermeneutic tradition of educational theory, or geisteswissenschaftliche Pädagogik. The object of its inquiry is 'educational reality' (Erziehungswirklichkeit). Educational reality is to be understood as a part of human reality, a specific area of human existence, and therefore as a part of the totality of historical-cultural conditions. As Wilhelm Flitner (1950: 25) stated, educational reality in its most general meaning contains a circle of life, or a segment of a life-world, in which education plays the central role. As such, educational reality seems only an abstraction, because it is in many ways a part of almost all structures of cultural and societal life. The starting point for the human-scientific or geisteswissenschaftliche tradition is the concept of Bildung. From that key concept other significant concepts can be derived, one of which is the concept of Bildsamkeit, or 'educability'. Education is preconditioned and becomes possible only through *Bildsamkeit*. The concept implies that the process of Bildung, or the formation of an individual, doesn't happen "naturally," by itself, upon the basis of the abilities of this individual; rather, this individual requires outside help in the form of pedagogical intervention. This is what makes education paradoxical. Education is at the same time an unfolding of individual powers and is in need of coercive intervention. By this, we refer to Kant's pedagogical paradox: how is it possible that we become autonomous and rational persons, when this result relies on coercive educational action? In educational literature this paradox has been seen as the basis for all educational practices (see, e.g., Klafki 1985). In the spirit of the Enlightenment, a human being is considered first and foremost a rational being. Educational coercion is thus seen as the very opposite of what the development of human being's skills and capacities ought to amount to. This coercion has been mandated by the abovementioned notion of Bildsamkeit, the fundamental human ability to learn skills and competences. Educators can demand students to act autonomously because they infer this quality in the not-yet-fully-rational and autonomous persons. This intervention does not only entail the influence of another person, but the influence of the world in a much broader sense.

To overcome the fundamentally rationalistic notion of educability, Bollnow theorizes these worldly educative powers existentially. One of the crucial aspects of these powers he calls 'crisis' (Krise). The concept of crisis is fundamental in meaningful learning (for a more elaborate take on the other forms of discontinuous education, see Kukkola and Pikkarainen in press; Koskela 2012; Bollnow 1959). A human life does not unfold in a merely "organic" process of growth, but rather only by passing through crises the world sets before the person. Crisis involves processes that stand out from the steady current of the rest of life (Bollnow 1966: 4-5). One could say that there are crises in human life to which education, as either formal or informal inner unfolding, acts as a solution. Crisis shows how life in general has a dynamic essence of being something that educates. Meaningful learning entails a kind of crisis, an understanding that what one does and knows is not enough and must be transcended. The crisis unfolds in learning when one comes to the possession of new knowledge.

Crisis does not, however, merely entail knowledge. Crisis reveals a need for a holistic individual change, a complete reformation of one's Gestalt. This is crucial in learning as well, as every learning experience involves an irreversible change in the person as a whole. Existentially, meaningful learning in a broad sense is crisis. Every crisis is a potential disaster. Unsuccessful learning can lead to frustration and loss of motivation, even permanently. Successful overcoming of the crisis signifies not only the averting of these dangers but also purification and an elimination of long-active conflicts. Overcoming the crisis purifies life from insignificant possibilities and challenges, and reveals what is truly possible and significant to the individual or a way of life. Thus, overcoming crisis means arriving at a new level that is only reachable by passing through the crisis (Bollnow 1966: 2). Learning in this sense is not only construction of something new, but also a peeling off or deconstructing of unwanted or unnecessary things. Crisis signifies a process that is characterized as "critical": a basic human attitude, in which a person takes up a position toward reality as something not self-evident. In this sense critical is not a reality but rather a human judgment about reality (Bollnow 1966: 22). When being critical, one examines the rightness or correctness of human statements. One applies critique to a situation, meaning that one discloses the error in it. For Bollnow, the crisis as we experience it is something that the human being must take hold of and complete in his or her own actions, precisely through this "critical" attitude and behavior.

The connection between crisis and culture critique brings the existentialhermeneutic notion of education close to the Kantian view of self-education and getting over self-influenced adolescence. However, the crucial difference is that existential-hermeneutic pedagogy nourishes the idea of a human being as a thoroughly subjective being, with his or her existential "core" untouched even after educational interventions, which can only be realized as a kind of appealing to the learner's subjective conscience. This "core," however, is not something hidden within per se, but is concealed within the constitution of subject-world relationship. Education is therefore to be understood in its existential sense as a form of 'self-education' (Selbstbildung), which involves worldencountering both in a knowledgeable way and in the sense of moral education.

The kind of self-education and world-encountering introduced in existentialism are distinct from the Kantian notion of *Bildung* in a radical way. However, what is left, and potentially quite compatible with Kant in the existentialhermeneutic notion of education, is the fundamentally formative aspect of experience itself. And even in its "reduced" form, education as appealing and self-education is a thoroughly Kantian idea of the same thing, but in a more existentially dense form. But if experience itself is formative, then in what sense are experience and meaning connected?

4 What is meaningful experience?¹

When we talk about meaningful experience, the term "meaning" in meaningful does not refer to the linguistic or semantic concept of the meaning of some word or expression. Neither does it refer to the usual semiotic sense of that word as a referent or an interpretation of a sign. Rather, by it we mean something quite immediate, the meaning of an object or an event to the subject who experiences it: How does the object feel? The starting point of action in theoretical semiotics has developed on the basis of Greimassian theory; the very concept of meaning being the most basic concept of semiotics, even more fundamental than the concept of a sign (Pikkarainen 2011). In order to define that basic concept of meaning or meaningfulness, we need another fundamental concept, namely that of action. Briefly put, meaning is the relationship or effect of something on the action of the subject. But what then is action? We will start by looking at action as just a simple relation of interaction.

Let us assume we have two hypothetical entities that are active in such a way that they can, at least in some circumstances, cause changes to the ways of being of both themselves and others. This active being also requires passive being, which etymologically does not mean being inert or stable, but rather refers to change as a consequence of some effect, an ability to suffer changes. So every relationship between these entities is at least potentially interactive, where both poles can affect and undergo changes to and from each other. If we now

¹ The content of Sections 4 and 5 have appeared earlier in Pikkarainen (2014b). Reprinted with modification by permission from Sense Publishers, Rotterdam.

think that one entity is a human being and another is anything in the environment of that human being, we get an active-passive interaction, which Dewey (1985: 113) famously called experience; and if we add to this his principle of continuity, we can call it action or interaction. This simplified basic framework for experience of meaning is depicted in Figure 1.

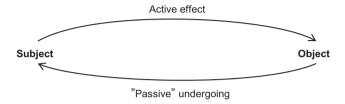


Figure 1: The circle of interaction.

This kind of interaction can also be causal. However, this model differs from the received view of causality because this is two-way interaction between entities, and causality is often seen as a one-way linear "path" to effect or determinism between events. Nevertheless, in the scheme of Figure 1 we could position in the place of subject, for example, some mechanical device such as a thermostat, or a simple entity like an atom, and then we could discuss the question of whether they experience meanings and what kind of meanings. We see no serious problem in this kind of discussion, but rather we would say that mechanical interactions between these kinds of physical beings should be called causal, and it would be better to restrict them to the domain that does not belong to semiotics proper. However, most likely all meaning-effects and meaning-experiences may necessitate causal relations, even though it is possible to differentiate between causal and meaningful.

The proper area for meaning and semiotics can be provisionally delineated with the concepts of action, life, and competence. This delimitation is unavoidably somewhat circular, because we should not use any concepts from outside semiotics. For this reason, we must be cautious with the concept of life as a biological concept. It would be easy to say that only living creatures can experience meanings, but it seems too difficult to limit the concept of meaning just to living beings. Action is a better choice, because no other science can define it better than semiotics that studies the action of signs (semiosis). When we investigate action as a meaningful object (i. e., "sign"), we discover that we can define as action only those events and processes, which seem to have a competent subject. Competence is the presumed or inferred feature of the

subject that makes it possible for him or her to act in a particular way, to be the subject of that action (Greimas 1987: 44–46; see also Pikkarainen 2014a). So, when we discover that something is happening, we can understand it as some subject's action if we can presuppose that the subject has the competences needed for that action. This means that we regard that subject as responsible for that happening. Life then can be seen as a whole comprising the subjects' actions.

There is therefore something not totally empirical in action, because competences are not perceivable, but they can only be presupposed or inferred from a subject's perceivable action.² Here we have a necessarily circular definition: we decide that the perceived happening is that subject's action, and then we infer what competences he or she has, but we must first presuppose that someone has the needed competences before we can regard him or her as a subject of that action. So we can never be absolutely sure, because competences are something internal to the subject. But there is also something else which is internal to the subject. We cannot perceive whether the subject is secretly plotting something, what kind of alternative actions he or she is planning, and especially what kind of meanings he or she is experiencing. It is precisely this *internal* side which differentiates proper semiotic action, as depicted in Figure 2, from plain physical interaction.

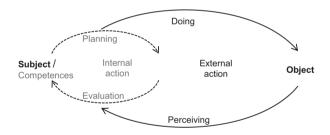


Figure 2: Action of a competent subject.

Now, at last, we are ready to define meaning as an effect of an object in the environment of the subject's action that duly affects the course of his or her

² It is important to conceptually differentiate between competence and performance: the latter is empirically perceivable but the former is not. Yet performance, the perceivable action, can be regarded as a sign which refers to competence. Analogously, competence and habit are not identical concepts. Habit can be understood as a perceivable repetition of some performance. A habit as an action is based on competence like all other actions.

action. This is quite a simple and straightforward definition, with a somewhat biosemiotic overtone. Some points must however be stressed. The competent subject acts spontaneously and autonomously, directing the course of his or her action within the limits and possibilities afforded by the environment. Although any and all of the objects in the environment can affect the subject and his or her action, it is always the subject himself or herself who steers the course of the action – at least partially, and at least the internal part of it. As biosemiotics emphasizes, the environment of the subject consists only of the meaningful objects – or perhaps only of the meanings of the objects. This does not mean that the meanings are supposed to be conscious. That requirement would exclude from semiotics most of biosemiotics and also most of the regular human actions. It is only required that the subject actively, and according to his or her competences, takes into account the "passive" effect of some object or objects in her action. Typically, this takes place when the subject perceives something, but it can also be that she knows or presupposes something about her environment, perhaps only tacitly and unconsciously, and, as often happens, erroneously or fictively. It is a deeply-held assumption that a competent subject as a proper subject of some action always has some goal or intention behind her actions that determine why she acts and what she is striving for as a result. Juridical and pedagogical discourse often addresses motives. This will be discussed further below, but now we can say that the goal represents an essential part of the subject's competence. While action is always in some way goal-directed, the environment of the action sets uncontrollable restrictions to the possibilities of what can happen, including that the goal will not be always achieved. Sometimes the action will be unsuccessful.

A central, perhaps the most important, initial function of meaning is that it can tell us whether we are going to succeed or not, and whether we should go on with our action, or change or stop. This requires only that the subject can initially differentiate between two meanings: good and bad.3 The good or positive means that, for example, a particular perceived object is something useful, and either the action towards it should be continued or action should even be steered towards it. Bad or negative meaning suggests that action should be changed in some other direction and the object should be avoided, respectively. This simple meaning structure can be depicted geometrically as twodimensional coordinates where the vertical axis represents quantity and the horizontal axis – the contents of meaning. Here the different possibilities will be situated in a triangle-shaped area according to Figure 3. If meaning is "low,"

³ Thom (1985: 284) speaks about the attracting and repelling signs; and Deely (2004) uses symbols + and -, and also delineates a neutral alternative, 0, which has no meaning.

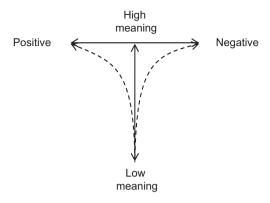


Figure 3: The simplest meaning possibilities as "semiotic triangle".

then it will be neither good nor bad, but if meaning tends towards "high," then there can be a contradictory and tense situation where meaning can be either good or bad.

With more qualitative possibilities for meaning appearing, the previous model of the semiotic triangle develops into a semiotic square (Greimas and Courtés 1982: 309). In a semiotic square (see Figure 4), high meaning similarly creates a tension between the opposites, such as food versus poison, friend versus enemy, or good versus bad in general. However, now in the more neutral situation there are also two possibilities, respectively: not-food and not-poison, not-friend and not-enemy, or not-good and not-bad (see Floch 2001: 20-23). Something that is not-food may have a "lesser" meaning, but it still can be poison, and on that occasion it will also have "more" meaning. It is important to know what some object is *not* – and what else it therefore *can* be.

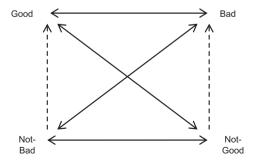


Figure 4: Greimassian semiotic square.

This multiplication of meaning possibilities and their organization in internecine relationships, which is depicted in the semiotic square, makes possible the specifically human conceptual learning and internal action based on concepts. However, this transition is such that we cannot trust it would take place via autonomous or spontaneous meaningful learning experiences: it requires education proper.

5 From formative experiences to pedagogical paradox

Next we relate the idea of a meaningful learning experience to the Kantian pedagogical paradox and its other side, educational action. As we have seen, learning experiences and more broadly the Bildung process are things that just happen to people. They cannot be anticipated or voluntarily caused, and they can lead randomly in any direction. They contain no guarantee of being fruitful. That is why we cannot rely on them in education. For example, we want to assure that children have at least a possibility of fruitful learning experiences by several means: by protecting them, by preventing them from doing silly things, and by forcing them to go to school. Kant stated in his lectures of pedagogy that the most difficult problem of educational theory is this: How can we reconcile freedom as an aim of education and coercion as its necessary means (Kant 1992: 20)? This problem has been called Kant's pedagogical paradox because Kant was the first to give it such an explicit attention (see, e.g., Klafki 1985).

Education, like all action, has some goals and pursues some values. According to Greimas, there can be two fundamental values or rather value pairs. One is Life versus Death and the other is Culture versus Nature. (These pairs should be situated in the semiotic square to achieve the proper value structure.) The first is the basis for all individual meaning horizons, and the second is for all collective or social ones (Greimas and Courtés 1982: 175, 361). Greimas does not relate to each other these two pairs that form the high meaning axis of the most basic semiotic square, in either idiolectal or sociolectal meaningful expression, respectively. Our view, however, is that they are developmentally nested so that Life versus Death is more original and represents the main value structure on the biosemiotic level. On the anthroposemiotic level, there emerges the new value pair which is somewhat in dissonance with the previous one and, in principle and in some situations, begins to control it. With this we mean that biosemiotically Life versus Death is always identical with Good versus Bad, but in social settings it is possible that Death or Not-Life (e.g., suffering)

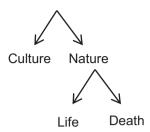


Figure 5: Structure of basic values.

can be better (in terms of value) than Life or Not-Death (e.g., escape) if it happens to be the prize of promoting or sheltering the value of Culture. This hierarchical value structure is depicted in Figure 5.

While all learning and action initially takes place in the biosemiotic sphere, pursuing Life – whatever it consists of for the specific subject – and avoiding Death is raised by education to the cultural and thus anthroposemiotic level. An educator is seen as a special source of authority, not unconditionally compelling and restricting in the manner of an environment, but rather as a moral authority which has an effect through the subject's own commitments. By reference to Greimas' (1980: 206) famous actantial analysis, this means that an educator is not a Helper but rather a Sender. However, the situation is not so simple because the educator – being herself an educating subject – must also have a Sender: she is acting by the mandate of the Culture. But if we regard Culture as a value rather than an actant, then we could suppose that the society that gives the statutory authority to the educator is the final Sender. Nevertheless, this is a problematic view because values cannot be reduced to preferences, and the laws and perceptions of society are effectively more or less shared collective preferences. So a better candidate for the final Sender would be a tradition understood as a continuous conceptual research program (MacIntyre 1988). Still, an educator is a mediating Sender who can often be also seen as a Helper or rather an advocate of the educated in her relationship to society, in accord with the hermeneutic tradition of pedagogy and the concept of pedagogical relationship (Wulf 2003: 31-33).

Values of education, and generally of all action, are thus either Life values or Culture values. 4 The former are based on subjects being the subjects of action.

⁴ Life and Culture values can be seen as dimensions from immediate to extended survival values. But it also must be stressed that Life and Culture values can often be in contradiction to each other.

They are means-end rational values of any action, but the most basic of them are those values which make it possible to continue to exist as subjects. Thus they are, of course, also important and necessary in the anthroposemiotic sphere. The latter could be any aims and contents of existing cultures and traditions, but the special anthroposemiotic core of these values is the ability to reason inferentially. This is literally a critical ability, because it makes it possible to rationally criticize any ideas, actions and situations. This is both the basis for human freedom and itself is based on freedom. As Brandom (2009: 117) stresses, it was Kant's greatest invention that human beings are free just because they can commit themselves to self-imposed norms and rules. By following self-made rules, human beings commit themselves to the moral responsibility with regard to what they do and what they should do. Only this commitment makes the inferential use of concepts and thus any rational deliberation on action possible.

This invention caused the famous core problem in the theory of education for Kant: the pedagogical paradox. In part, this problem can be now reinterpreted so that the aim of education is to raise the person who is being educated – usually a less experienced person – to the anthroposemiotic level, and develop his or her anthroposemiotic competences, but the *means* of education (usually used by a more experienced person) must largely be biosemiotic. A possible direction towards a solution to this problem could be the analysis of a modal structure of human competences. It is important to note that the question of moral responsibility and rational deliberation is connected to all action, not just some specifically-moral action. According to Greimas' theory, there are four types of modal competences connected in every special competence of some doing (Greimas 1987). These modal competences are respectively related to the modal auxiliary verbs: Want, Can, Know, and Must (see also Tarasti 2012).

Finally, we briefly draft a model of modal learning that could lead from the biosemiotic to the anthroposemiotic sphere, and thus realize the Bildung process. This learning will take place in three stages. The first stage is purely biosemiotic (and pragmatic). In it, the subject first wants to do something to achieve some state of affairs. Then the subject tries to do that in some manner. Depending on the environment, the subject can or cannot do it and achieve her goal. Now, and at least after some trials, the subject will know how she can or cannot achieve the goal. This know-how will take a virtual form of a technical norm: if I want to get X in an environment Y I must do Z. Such a recurrent circular process is depicted in Figure 6. In the second stage, the situation is social and the subject must take into account other subjects who have their own goals. Now, in addition to the physical environment, there is also the actantial environment with useful Helpers and dangerous Opponents and mighty Senders and Receivers. The subject must negotiate and accommodate his or her goals

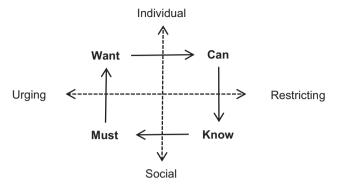


Figure 6: Model of modal competences and modal learning.

with the goals of others. The most important change at this level is through the new medium of negotiation: human language, which combines the modelling and communicative functions. This makes it possible to transfer to the third stage, where the subject can explicitly discuss her aims and beliefs both with herself as well as with others. This starts the "game of giving and asking for the reasons," where a reciprocal commitment to the mutually understandable rules of reasoning is essential. Now the subject can rationally articulate and form her own desires, ideals, and identity (Stojanov 2007). What is most important is that the subject can both relate her own goals to those of others and rationally evaluate them.

6 Conclusions

Considering the focus of this paper, the expression "meaningful learning experience" becomes a pleonasm, because only meaningful expressions affect subject's action and thus lead to learning. Still, it can be useful in two ways. First, because it points to that necessary interdependence between experience, meaningfulness, action and learning, it reminds us as educators to build and offer possibilities for meaningful experiences as challenges to action for learners. Learning, i.e., a transformation or development of the learner's competences, takes place only in consequence or rather as an effect of learner's own action. This requires that we take into account and utilize the competences that the learner already has. Especially important here are the modal competences that refer directly to the emotional contents of learning situations. Secondly, this expression refers to the retrospective character of learning stressed by Stables (2005). We can only tell afterwards whether some events were really meaningful learning experiences in the sense that we have indeed learned something meaningful and significant. In learning we always encounter something new to us: and so we are not able to know beforehand what it will be and where it can take us. This also stresses the educator's responsibility to try to anticipate (as based on history and tradition) what competences will be most important and meaningful in the future of the learner. Mollenhauer (2013) called this feature of education "representation." Kant's pedagogical paradox is this practical problem of production of meaningful experiences: to cultivate freedom by coercion. There is always room for paradox in edusemiotics.

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