Approaching Education through Edusemiotics

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'Everything is a sign and still nothing is a sign unless it is interpreted' (Semetsky 2017:8), is the stance taken by the editor of the book, in the first chapter of this book. I have always been fascinated by signs and their interpretation, by how signs transform or transmute into other signs and evolve – through time – into other signs or sign systems, or even revolve around an already existing sign system which is reproducing itself.

A bird's eye view may direct an interested party to no correlation between education and semiotics, yet signs exist in textbooks, in pictorial presentations of objects and even in language itself as symbols, icons, etc., are all aids to learning, in the case of a foreign language, the learning of new words (see also Nöth 2014). A student may not remember a word, in the foreign language, if asked by the teacher, but given a picture, an icon, the student may be able to produce the word both phonemically and graphemically. But as the human race evolves so do signs. Nevertheless, it seems that we are 'born' with a predisposition to 'know', 'interpret' and 'use' signs as it comes natural for a student, from as early as primary school, to see a picture of a child with earphones, in his or her textbook and to realize that s/he will probably be doing a listening exercise within the next few minutes. Thus, it seems that we not only use signs, but as Semetsky (2017) puts it we, as humans, are signs too.

The gap between semiotics and education was first bridged in 2008, at the University of Oulu, in Finland, by officially giving a 'name' to two different disciplines, namely education and semiotics and thus coining the term edusemiotics as an autonomous transdisciplinary field. Semetsky and Cambell (2018) place this date a little later, in 2014 in the IASS congress in Sofia, Bulgaria, and more specifically in the New Bulgarian University in which 'theoretical semiotics' first appeared. This book, which consists of twenty chapters, focuses upon semiotics, educational theory and practice as well as educational philosophy.

The second chapter which, in fact, follows the first, namely the introduction section previously discussed, probes into the academic culture, after the 17th century, and the science of signs, and supports that human experience is filtered through a 'dynamic interaction', as

Pierce called it, between the physical universe and the 'construction' of semiosis by the human race which is also part of the semiosis in nature (see also Deely 2017). Mankind, and his or her experience, is mediated and perpetuated by a sign system. A sign may mean nothing but connected to an object it acquires an irreducible bond which may last for life. Our minds have an almost magical predisposition to form mental representations out of objects which trigger the interest of our apprehension and stimulate our imagination and cognitive capacities. Thus, without wanting to sound hyperbolic, I do support the stance taken by the author that human beings are 'semiotic animals' and as such it may be considered natural that all animal awareness starts with sensations, not with the ideas of sensations (see also Deely 2017), and that if humankind is a 'semiotic animal' then the interpretation of semiosis in nature can only exist because the ideas of the specific subject, under scrutiny, function as a sign, and has the universe - itself - as the object of 'semiotic inquiry' as Deely (2017) so rightfully puts it. And, so, very simply but at the same time so very blatantly, semiotics becomes the only discipline which can lead us to the core of the problem of knowledge, which is that signs may be able to guide us everywhere in nature, as Deely (2017) names it, and to teach us, if I may add.

The third chapter addresses the subject of teaching, knowledge and semiotics. Vygotsky, a scholar of grit, is indirectly placed in the forefront by the author (Legg 2017), in the sense that it was he who first introduced the concept of the 'Zone of Proximal Development' (ZPD), followed by Bruner (1957, 1960, 1961), who introduced a more sophisticated revision of Vygotsky's stance, namely the interactionist or social interactionist theory. Legg (2017) takes all this one step further in the sense that she talks about 'scaffolding education iconically', and attempts to go beyond the written information given in a text. The main aim of teaching is to convey meaning, which may not be conveyed solely through words but also through pictures, mathematical diagrams, etc. Teaching, which is a human construct, thus acquires a new dimension, which is that of eliciting meaning through signs, just like Socrates with his 'Socratic questioning' or 'maieutic method', who elicited information through reason and logic. Iconic signs, if wisely and diligently applied, play a useful role in active – heuristic learning and teaching, as they exercise our imagination, by demanding an answer to questions put forth, and thus rationalizing our thought and conduct as Pierce (in Legg, 2017) puts it, and connecting us with the 'real-world situations' with which they intermediate (also see Legg, 2017). Nevertheless, everything we do should be done sparingly because by rendering our teaching and pedagogy 'more iconic' we may risk transforming it into something of a 'passing show' as Legg, (2017) very humorously puts it.

The fourth chapter outlines, on the one hand, the interconnection between mathematics and geometry, which is highly involved in 'the dialectic of sense and idea' and, on the other hand, edusemiotics which wisely takes this particular characteristic of 'conceptual knowledge and learning' under consideration (Gange, 2017). Rotman (2009), a mathematician by profession and an established philosopher today, depicts mathematics as a science which is

cognitively difficult, technical and abstract, adding that one can understand mathematics only if s/he is actively and conceptually involved in the discipline and understands the quirks of the particular science. Nevertheless, mathematics, just like any other code of communication, gives its readers/learners a chance to 'see' reality under a different perspective, what Plato, a Greek mathematician and philosopher, coined as a way of understanding more about reality, as mathematics, is in fact, 'a timeless and unchanging realm of pure ideas' Ernest (2008:3). In teaching mathematics, we are in fact teaching semiotics, the semiotics of mathematics, according to Grange (2017), as both mathematics and geometry are in essence semiotic. We are trained from early childhood to play with balls which are circular, thus we become acquainted with the concept of a circle, or to play with cubes thus becoming acquainted with the shape of a square, and by the time we reach primary school we are well aware of geometrical shapes and what they depict before we are formally introduced to the concept of teaching and learning geometry. But 'knowing' geometry does not, simply or only, mean that one has a sound knowledge of the contents of the discipline but that he or she is given the key to unlock the secrets of the universe, as Plato supported.

Chapters five and six reflect upon matters of education, more specifically, metaphors, models and diagrams, as well as education and reasoning through a Peircean perspective. Education is seen through the prism of reasoning and experience by Pierce in chapter six (see Quay 2017), because according to him 'experience is our only teacher', much like Dewey (1910, 1915) who supported that students learn by doing something, in other words they learn from their experience of doing something which is interpreted into logical reasoning and action ('learning by doing' was how Dewey put it). In chapter five there is an attempt to correlate metaphor and educational theories and how the aforementioned can be applied in the teaching of language and mathematics. Metaphors and diagrams are inferences which translate metaphorical guesses into visual stimuli, and their applications have been highly neglected in the field of education, nevertheless, both seem to be very valuable in the teaching of mathematics and the learning of a foreign language, as the seminal article of Lakoff and Nunez (2000 in Danesi 2017), has shown. Two very contrasting theories in learning have attracted the attention of 20th century teachers and researchers in the field of teaching and learning, more specifically the behaviourist and the cognitivist theories. The question here is how do these theories connect to the concept of metaphor? The author supports that the 'mental training process' of a person is very much like the training of the human body to conduct a specific action, this is closely associated to behaviourism, whereas the 'computational or algorithmic systems' have strong similarities to the 'mental organization process' and are closely associated to cognitivism. Metaphor, thus, seems to be interweaved in both the theory and practice of teaching and learning and has two parallel, but at times converging, aspects to it, namely the Metaphor-as-Theory Hypothesis through which the professional educational cultures verify their models with experiments which are based on an initial image of a metaphor, and the

Metaphor-as-Practice Hypothesis, which allows for the application of the metaphor directly into the educational practice. Metaphor seems to be, not only a figure of speech, but a driving force which activates both our imagination and our cognitive processes in learning mathematics and language. It is the way we decode what we see around us and how we delineate this information into our cognitive model of the world within which we live.

Chapters seven and eight broach the subject of pedagogical values through edusemiotics as well as semiotics and meaning in the Greek educational system respectively. More specifically, the stance taken by the author of the article in chapter seven is in line with the philosophical stance in ancient Greece, in which pedagogy was directed to the whole person. More specifically, the author supports the views of different scholars (including the view taken by the discipline of neuroscience today), who strongly believe that the mind and body of a person should be exposed to different stimuli thus catering for their needs as a whole. Lovat (2017) connects educational values and 'good practice pedagogy' and tries to answer the question of what constitutes knowledge and truth and how they are all connected to edusemiotics, bringing forth scholars and philosophers such as Dewey, a firm believer and supporter of 'moral education', which is at the core of all education (and is considered authentic education). Dewey talked about the necessity of an installation of 'inquiry and moral capacity' in all students who are considered the successors of human kind. Habermas, the second philosopher Lovat (2017) focuses upon, is a prominent German philosopher who is renowned for his firm beliefs on epistemology which revolves around 'a way of knowing', of theory which is both complex and holistic and which can be described as a 'complexity science' or a 'complex system'. There is a strong rapport, according to Lovat (2017), between edusemiotics and this complex system, as both present themselves in their entirety, not their individual parts, the minimal unit of analysis.

The eighth chapter, which follows, may not 'refer to one relationship between the three texts' under discussion (as the authors mention) but it does connect the concepts of paideia, education and values in the two legal texts and the UNESCO report, all of which are under scrutiny. The choice of these three texts does not seem to be at random as the authors' delineated two very important constitutional texts, article 16 (2) which deals with paideia in Greece and Act 1566/1985 which deals with primary and secondary education in the aforementioned country. The third text, has a global nuance, and is the Delors Report which was drafted in 1996 by the Delors Commission and envisaged the kind of society within which we would all like to live, thus giving a more humanistic tinge to its contents rather than a market-driven approach to education. Delors Report could be considered a lament in the form of a report to a distorted modernity and to the continuous local and global tensions of our time. The messages extracted from all three texts, nevertheless, need a sound knowledge of more than one disciplines (including law) and an able and well-trained mind to decode, process and classify the new information to the already existing mental depository,

thus producing a three-dimensional relationship between the texts which intertwine but which are, at the same time, independent of each other because of the different perspectives which each of the three texts depict.

Chapter nine delves into the concepts of edusemiotics, existential semiotics and existential pedagogy. In lieu of Pierce's philosophical stance on man being a living sign, Thomson (in Kukkola and Pikkarainen 2017:123), proposes Heidegger's standpoint (a much-debated philosopher and existentialist because of his loyalty to Hitler), 'become what you are', meaning an endless process of becoming or change, or 'we can become what we are only because we are what we become', as an antithesis. Heidegger (who supported pragmatic and existential learning), pre-empts his perfectionist education to existential learning, attempting, in this way, to bridge the gap between genuine learning or 'aletheia' (the unveiling of the truth), as he purports, and tradition in education, which is ever-changing. By nudging aside John Locke's well-worn ideology on how a person comes into this world as a 'tabula rasa' (blank slate), Heidegger questions the stance taken by many philosophers of the 16th century, that we come into this world with no knowledge only to have knowledge 'poured' into our soul by a divine 'other' or a 'knowledge carrier'. Bollnow, a teacher and a much-debated philosopher, himself, because of his loyalty to Adolph Hitler and the National Socialist State, broaches the subject of education humanistically and hermeneutically. One cannot acquire knowledge and thus form and develop his or her personality without pedagogical intervention. Though from a different sociopolitical stand point, Bollnow's pedagogical ideas – surprisingly - converge, to a large extent, with the pedagogical ideas of Soviet psychologist Lev Vygotsky, the founder of the unfinished Marxist theory of human, cultural and bio-social development. Man learns, socially, aided by the environment in which s/he lives, such as the school environment, his or her parents, older brothers or sisters and peers (Vygotsky) or with the aid of pedagogical intervention (Bollnow).

What changes does education bring about to the human mind? Semetsky (2017) attempts to answer the afore set question in chapter ten of this multiauthor volume. A person learns through actively constructing knowledge or through 'doing' and mediation according to Dewey (1910). Bruner (1960/1961), on the other hand, coined the term 'scaffolding' which describes the way children build new knowledge on the already existing information which they have mastered "the old and the new" as Dewey calls it (Dewey in Semetsky (2017: 144). When the 'new' breaks away from the 'old' according to Dewey, in the unconscious mind of a person, 'issuing a command to one's future self' as Pierce (in Semetsky 2017: 148) formulates, then we begin to learn. Bruner's stance, on learning and education, had many similarities to the stance taken by both Pierce and Dewey. Bruner brought forth three different modes of representation, which were in line with what both Dewey and Pierce supported, namely, enactive representation which is action-based ('learning by doing' according to Dewey), iconic representation which is image-based (according to Pierce), and symbolic representation which is language-based (often symbolized by words according to Pierce). Intelligence, and more spe-

cifically human intelligence, develops and flourishes through actively constructing knowledge, through 'doing' (and 'doing' here may be used in the sense of doing an activity or 'doing' in the sense of constructing something physically), and through mediation with the environment within which the person lives, thus constructing metaknowledge, the construction of the 'new' from the 'old'. A never-ending process of learning and development.

Chapters eleven and twelve focus on the academic pathologies, or of the academic self with a focus on the anxieties of knowledge and the complexity of interpreting ourselves, through a process of writing for self-examination, self-therapy and perhaps even confession. A slow, painful and often lonely path most writers hobble through to reach a self-cleansing point which is the point of the completion of their text. It is the uneasiness of exposing oneself through writing and the frustration of having to produce a piece of writing accepted by the 'know all' public, the point of culmination, the final point, the point of freedom, the completion of the text. And once finished, perhaps because of the 'polysemic nature of language' (see Farquhar and Fitzsimons, in Semetsky 2017: 168), the burdening questions arise: Was I true to my word(s)? Or even: Was I true to my context? Was that in fact what I was trying to say all along or am I still hiding behind a façade of untrue words just to please? Is my interpretation of the 'self' and the 'universe' objective? So, the pain is still there to remind us of the feeling of discontent and unaccomplishment, the feeling of the unfinished, of entrapment, allurement and captivation within a maze that has no end and no beginning, the deep mental and psychological suffering of the author or the 'fear of the author' as Peters (in Semetsky 2017: 155), puts it. This fear is tightly interwoven with the exposure of the 'self' through one's writings, our 'narrative identity', as Farquhar and Fitzsimons (in Semetsky, 2017: 165) so rightfully put it. The 'self' metaphorically becomes 'a form of a text, to be variously interpreted and then re-inscribed' (Farquhar and Fitzsimons, in Semetsky 2017: 166), an amalgamation of the self and the text, or 'life as [a] continuous textuality' (Farquhar and Fitzsimons, in Semetsky 2017: 165), from which we are unable to 'step outside' (Farquhar and Fitzsimons, in Semetsky 2017: 170), in our attempt to reinterpret ourselves.

Chapters thirteen and fourteen address the role of the reader (through Umberto Eco's novels *The name of the rose* and *Foucault's Pendulum*) and reading history respectively (education, semiotics, and edusemiotics). Through the two novels the reader is trained or tutored to decipher the hidden meaning which exists within both texts, a form of semiotic education, Eco's labyrinth of signs, his two mystical worlds, his two novels. Trifonas (2017: 190) claims that both novels are 'labyrinths of inter-textual associations conjuring up images of other books reflected in [them] as well as unrestricting the possibilities for deriving meaning from [then]'. From a passive recipient of information, the reader gradually becomes an active participant in the novel's plot, a student ready to devour new information and to construct new knowledge from the old, a 'detective' ready to unearth and decode hidden clues, signs and messages. The novels, thus, become the means through which the reader constructs mental 'pictures' of a

possible world and of new knowledge, and partakes actively within this imaginary world, be it the world of today or the world of a time long past, the Middle Ages. And both education, the acquisition of new knowledge, and semiotics have their roots in 'the hermeneutics of medieval mystical theory' (Olteanu 2017:193), in other words, in the time long past, in history. The metaphysical is presented through the Bible, in the work of Olteanu (2017), and is connected to education and hermeneutics as a semiotic method. The Bible offers fertile ground to education in the Middle Ages as it offers knowledge accepted by the elite, the ruling class, the church, and is considered seemingly harmless. But to a leery and suspicious mind it offers food for thought and thus the construction of new knowledge through research and experimentation, laying the ground for postmodern education, for the education of today.

The fifteenth- and sixteenth-chapters explore the interpretation of metaphor in heteroglossia and heritage language learning respectively. In interpreting metaphor, we need common ground, in the sense that both the language in which the metaphor is presented and the concept it is trying to convey should be made comprehensible to the interested party. In the case of heteroglossia, according to the author of the article (White 2017), the aforementioned play no role, as the role of the sign becomes the means through which the metaphor is interpreted, evaluated and reinterpreted. In both chapters, the authors focus on the amalgamation of cultures, languages and the 'voice' of the 'other' in language learning and teaching, as well as the teacher's role, especially in the case of heritage language teachers (in chapter sixteen). In the case of a foreign language teacher it is important that the decoding of clues and their interpretation into a verbal or written code of language, become part of their (the teachers') training as well as a part of their pedagogical role. Teachers should not only be able to guide students towards an understanding and interpretation of symbols and signs but should also guide them towards constructing and thus producing symbols and signs themselves (which could be viewed as a positive learning challenge by learners). In the case of the heritage language, which is usually the language spoken at home but not at school or in the society within which a person lives, teachers do not simply transmit knowledge of the heritage language but also of the signs which compose the culture of the specific heritage language and which facilitate the learning of the aforementioned language (see Atoofi 2017). Teaching, especially the teaching of metaphor, may seem an 'easy' venture but this may not always be the case, as we see in both chapters. Bakhtin (in White 2017: 210), sees metaphor, or the teaching of metaphor, if I may add, as a "social event of aesthetic engagement, where meaning is generated out of the moment-not in its analytical aftermath". Bakhtin's stance is very much in line with Saussure's (see Ireland 2003) dyadic relation of signs (in contrast to Pierce's triadic relation (see Danesi and Perron 1999), in which the sign, or the signifier and its meaning, the signified, is in an arbitrary relationship because of the social conventions which influence their very existence, as Saussure maintained. Metaphoricity, literally and figuratively, is not only the means of creating new meaning or simply sending it, but it is also a way of enriching the language

potential of a language learner, be it a mother tongue learner, a foreign language learner, a second language learner or a heritage language learner.

The seventeenth chapter seeks for the theoretical development of semiotics in the works of Julia Kristeva and Emile Benveniste, while at the same time it probes into (the very much in vogue at the time) generative grammar (through the eyes of Chomsky), into linguistics and into the philosophy of language. Both scholars were touched by the 'revolution' in linguistics, most so Benveniste, loyally followed by Kristeva. Both had a very progressive stance linguistically and politically. Both shared a common viewpoint in linguistics and language, in the sense that he (Benveniste) 'reconnect[ed] the morpho-syntactic details to the overarching linguistic and philosophical categories […] able to signify, to "tell", to investigate in detail, hiding nothing behind any aesthetic screens' (van Mechen 2017: 244). But Benveniste avoided defining language, 'langue', just like Saussure did before him, rationalizing his decision by giving examples, thus showing how things work in practice, and here we see Dewey, and his philosophical stance, once more. Kristeva becomes his (Benveniste's) 'voice', supporting, confirming and strengthening his idea of the 'continuous intervention of psychic process in traslinguistic messages' (van Mechen 2017:236). Another point made by both scholars, especially Kristeva, concerns the history of semiotics, in other words. 'the way semioticians deal with the history of their field and study' (van Mechen 2017:236). Kristeva, once more influenced by Benveniste, supported that there are instabilities in the concept of speech (parole) and the language system (langue) and these instabilities are welcome as they draw our attention to the psychic of a person, his or her very depths, thus, telling us something about the influence the subject had on the persons utterance (van Mechen 2017: 244). Kristeva flourished (in her conceptualization of semanalyses) in the hands of Benveniste and she repaid his support by praising 'his ability to encompass the long tradition of linguistics, philosophy and semiotics', past and present (see van Mechen 2017: 244).

Chapter eighteen goes back in history to Plato's 'chora', and connects it to 'black holes', as existing realities, and also with the 'other', where the 'other' is the unknown in this case. 'Chora' is immaterial and yet it 'exists', and it cannot become the other as it is a form of 'other' anyway. 'Chora' as a black hole brings an internal imbalance as the uncertainty of the existence of the individual becomes debatable. So, how do we explain the reality of our existence and how do we continue to exist and reproduce if there is nothing? Is what I see simply a figment of my imagination, or is the person seated next to me a reality? Does nothing derive from something? Such philosophical questions seem to arise in chapter eighteen which also talk about the absence as a form of presence. The 'self', as an object, is 'devoured' by, and into, the 'black hole' of the 'chora', which stands for the unknown and which is never empty, as it 'gulps down' everything including the very essence of our existence. Even though we may not have a clear picture of what is included within a 'black hole', we can see what surround these 'black holes'. Hawking supported that there is "another universe inside every black hole and possible

gateways to other universes", as Crawford (2017: 253) mentions. Plato's stance on 'chora' and procreation is staunchly supported by recent research on the Big Bang Theory' and the 'black holes'. Perhaps, then, it is only appropriate to say that 'black holes' may be the beginning of a new existence, the 'beginning of becoming', as Crawford (2017: 252) so rightfully puts it. The concept of love goes back to Plato and before him, the first signs of the word 'love' are found in ancient Egypt, in the form of desire. In the Bible, too, the concept of love and love making is neatly hidden under a façade of 'acceptable' language, thus concealing the in appropriacies which love may carry within its broader meaning. But then aren't we, as a human race, made of flesh and blood and don't all our organs (heart, brain, etc.) participate in love as a notion and love making, as an act? Aren't we created in the image of God ('**κατ' εικόνα και καθ**' **ομοίωσιν**'- kat econa kai kath omiosin)? And isn't God, himself, love? So far, this multiauthor book has explored themes which focused mainly upon matters of education, teaching and edusemiotics.

The chapter which follows, chapter nineteen, approaches a very interesting and refreshing concept, that of 'love', through the eyes of Seif (2017) and attempts to correlate love with edusemiotics. But how does 'love' or 'eros' fit into all this? How is love connected to teaching and learning? How do we define 'love' or 'eros'? Seif (2017: 273) supports that we live, we learn and we love and we all have a 'love for learning and the desire for creation'. The human race has often connected eros or love with sexual desire, but sexual desire may not always be connected to love. Sexual desire is often connected to something trivial, to the desires of the flesh, while love is 'oriented towards wholeness' (Seif 2017: 265), the spiritual and sometimes somatic unity of two (often different) entities. Semetsky (in Seif 2017: 265) talks about the interconnection between love and erotica and the exact relation is 'indeed the province of edusemiotics that acknowledge the creative power of paradox'. Our feelings, even those of love, and our thoughts come to light through the images we produce and these images may be voiced, according to Semetsky (in Seif 2017) in the form of words in edusemiotics. On the other hand, according to the author of the text 'the origin of knowledge is love' (Seif 2017: 271) which exists within all spiritual traditions and that 'only love in its various forms transcends survivably and sustainably and enables thrive-ability and liveliness' (Seif 2017: 274).

The last chapter of the book, chapter twenty, broaches the subject of pictorial language and the unconscious, through the occult, and more specifically through the interpretation of the Tarot cards. Semetsky (2017) attempts to decode the symbolic nature of the tarot cards according to their position in the 'spread', thus bringing the unconscious forth to the conscious, in this way achieving an internal awareness which has not yet been expressed in words. This new awareness tilts our attention towards a new objective, a new goal, a new perspective never before thought of. A new awakening, a rebirth.

To round off, this collective volume is the epitome of edusemiotics. It subtly connects education and semiotics into the new and emerging field of edusemiotics, through the theoretical

research it presents, thus contributing, yet further, to the particular state of the art. It makes informative, educational and enjoyable reading to both novice and more experienced readers in the field. More specifically, for a didactician, such as myself, this book gives insights into the theory and philosophy of education, prompting its readers to think and act beyond the conventional boundaries of education (and teaching for that matter) as we know them. It gives didacticians a second option, a second point-of-view, a new scope upon which to construct new material and to build new methods of teaching. Though it is a book which focuses mainly on theorical research, it does nevertheless give way to some – though limited - empirical research too, thus paving new roads in edusemiotics through experimentation and experimental research, which, once conducted, will give insights and enlighten scholars, especially didacticians in constructing new methods and approaches in teaching, especially the teaching of a foreign language.

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