

## "When the facts change ..." - The future of pedagogy between continuity, departure, and contemplation –

### Celebration Speech at Doctor Honoris Causa

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The future is the most fundamental focus of pedagogic thinking; although, it is also its blind spot. Generally, the debate is oriented on the betterment of man over time; whether as an advance in the personality development and competencies of individuals or, as the more generic project we call: civilization. The latter has been defined by the degree to which reason has been properly used throughout history. How much personality development seems to be necessary and attainable can make sense only in the context of the use of reason. The form of expression is also measured by the self-distancing achieved through the development of the necessary skills to rationally analyze the world and justify the appropriate actions.

John Maynard Keynes once said: "When the facts change, I change my mind... and what do you do?" (Damodaran2012, p.4) – a question that confronts us as we think and make judgments, but also as we use language and the historical experience it reflects. In this sense, a person is "educated" if they are in a position to see "the use of reason as problematic" (Ruhloff 1996). This interpretation distances itself from educational practices that show a bias for knowledge, truths, and beliefs without sensitizing for forms of mistake, illusion, and ignorance. To "problematize" must be learned and practiced – especially, to see your own preferred art of speaking as problematic because meaning is not necessarily true just because we say it is or because we express our thoughts in a language that we have learned by chance.

#### **We observe and think in "a prison of language"**

Our language holds us prisoner with its words (Wittgenstein 1984) – a fact that becomes especially clear with the German term for education. The word is very difficult to translate into any other language since it contains connotations that are ultimately

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religious in nature: God created man in his own image. In Germany, education always has had the aspect of transforming individuals such that the divine in every person is brought to expression. It would be interesting to continue to follow this line of thought in the education debate in Germany, as I am sure other languages – perhaps also in Rumanian – also make use of connotatively-charged terms. However, such a *linguistic turn* would get lost in the realm of specifics, where it is a question of understanding across languages.

I will limit myself to a brief look at the concept of learning, which is increasingly important in the European education debate. "Learning – The Treasure Within" is the title of a UNESCO report published in 1996. An etymologic analysis of the German word *Lernen* (to learn) reveals that it belongs to the Indo-European root word "*Leisten*" and is closely related to the words "*Lehren*" (to teach) and "list."

"*Lais*" was the Gothic expression for "I know." "*Lis*" is the Indo-European word for "go." There is much evidence to suggest that learning has long been understood as a process in which the learner has to take a path and acquire knowledge along the way."<sup>1</sup>

The similarity of the two words "*Lernen*" and "*Lehren*" is striking in German; in other languages, just one and the same word is used for the two activities: for example, in classic Greek "*didaskhein*" is used for both: "*learn*" and "*teach*":

"Hence, the original Greek merges the causative sense of teach with the mediative "learn" into one form (...), just as among the average German people today who use "lernen" and "lehren" interchangeably (Riemer 1819, p.385) – as printed in a Greek-German dictionary from the year 1819.

An interesting exercise is to examine how "*Lernen*" as a natural activity of life (like breathing) increasingly became defined as a certain action through "*Lehren*" – even to the point of forming an inseparable relationship and, from a didactic science, to not having a scientific character of its own (cf. Holzkamp 1993). It would also be interesting to trace the concept of learning in the Rumanian language and investigate the didactic world view conjured by the Rumanian words "*invat(z)are*" (to learn) and "*predare*" (to teach). The word "*Predare*" like "preach" have the same root word and most likely have something in common with the Latin word for "prey" (German: "*Beute*".) To learn is to capture

<sup>1</sup> cf. [www.h-age.net/hinter-den-kulissen/144-was-ist-lernen-etymologische-wurzeln-definitionen.html](http://www.h-age.net/hinter-den-kulissen/144-was-ist-lernen-etymologische-wurzeln-definitionen.html) (retrieved: April 13, 2017).

something and "prey" is always associated with something wild and free that is acquired, so to speak, illegally appropriated – again a connotation referencing the power and authority that continues to affect the didactic world view.

Could it have been this urge for social power that sought to restrict and control self-directed learning? Was it the motives of the church and the nobility to maintain control that lead to attempts to create the "teachable body" through rigid discipline as Michel Foucault has proposed? Are these the motives that ultimately generated a separate concept of "teaching" from the concept of "learning" and led to a "pedagogical disproportionality" as the Austrian Nora Sternfeld, professor at Aalto University in Helsinki, suggests in connection with Rancière, Gramsci, and Foucault. In reference to Foucault, she writes:

*"In the genealogy of disciplinary mechanisms, the members of the society appear to be nothing more than conditioned beings. It is appropriate to ask to what extent "controls and punishments" reflect a deterministic view of society" (Sternfeld 2009, p.97).*

But is this deterministic view a realistic one, since it was conceived in the first place through the duality of learning and teaching? Or, is it derived from the illusion of controllability over a matter that – after a rational analysis – cannot be controlled?

Let us remember the Keynesian question: "When the facts change, I change my mind... and what do you do?" (Damodaran 2012, p.4). This question is directed at us, as we are all socialized in a teaching and learning context and so think of ourselves as teachers and instructors and will, most likely, continue to do so. Are we really able to abandon our hard won assessments, when a rational analysis reveals something better? What emotions drive us when we have to realize that we have been mistaken? Do we correct ourselves, or do we insist by means of trying to hold on to a part of our former conviction without knowing why; stuck on teaching when the focus should be on learning?

### **The future as a continuum: anticipating future application scenarios**

To this day, the notion of *anticipating* future challenges remains an essential element of pedagogic thinking. While it is true that no one can actually foretell the future, the general assumption is that it will not be all that different from the way it is today. This assumption may have been valid for a long time, but it loses nearly all of its justification in times of disruptive innovation (cf. Christensen 2011). The innovation seldom emerges from the

current status quo, but often tends to infiltrate via the crossover effect from other areas. No more powerful analogy exists than the story of the leading photo developer that revolutionized the dominant technology of the time, pushing out the previous market leaders. Then, at some other location (for example, Silicon Valley) a digital technology was introduced and perfected, which ruthlessly proved to be an unanticipated and extremely capable alternative to the status quo. Such was the fate of the Kodak Corporation – once the world's foremost photo technology company– completely overwhelmed and liquidated by the new digital photo technology. Today, Google's attempt to insert itself between the current market leaders and their customers in the taxi and transportation sector is another threatening first step towards the takeover of the core business.

How can we anticipate a future use scenario in the disruption following innovation? How can we prepare the apprentices, students, and adult work force for the disruption of the future job market?

Such questions shake the foundations of traditional beliefs. We can no longer rely on the – supposedly – safe ground of the technical and predictable, rather we must learn to move on the uncertainty and openness of the future and derive the right education policies, curricula and, above all, the didactic consequences. This is far from easy, especially, since the key competitive selling point will always be the attainable technical level of the products and services: We all buy the better design and the most user-friendly mobile phone, without asking about the relationship of education to the production that gave us the options to compare in the first place. However, technical superiority today is not just the result of the professionalism of the actors involved, but comes from a globally networked product design. In simple terms: *The concentration of all expertise in one and the same person – the professional – is replaced in the digital world by the networked combination and use of distributed specialization and competitive advantages.*

The "age of specialists" (Max Weber) is coming to an end. It appears that its fragmentation, blurred borders, and "de-specialization" are the signs of future times. In addition, we are all threatened by the "continuity trap." We are tempted to follow an unintended conservatism that, ultimately, holds to the assumption that the future, for the most part, will be the same as the past has been. The effect is that we find ourselves again and again in the position of wanting to solve problems with the same "type of thinking" that

we used to cause the problems – a self-limitation that can never lead to success as Albert Einstein (1879-1955) pointed out (cf. Stahlbaum 2014).

### **The future as a departure: anticipating the "yet to come"**

Proposals for the new future thinking are found, in particular, among those who have failed at the given forms of education and have had to discover for themselves new – mostly informal - pathways to their own learning abilities. There are the support methods of integrative or even therapeutic instruction (cf. Kreszmeier 1994) as well as the character development approaches of vocational training in the European concept of lifelong learning. It is worth remembering the fact that advances in adult education for many decades were developed in the shadow of the spirit of the time: "You can't teach an old dog a new trick!" In contrast, the recent view of the lifelong struggle of adults for identity and competence has gradually emerged and established the point of view summarized by the Swiss cognition researcher Elsbeth Stern: "What the puppy didn't learn, the old dog will figure out!" (Stern 2006, p. 93ff).

At the same time, the informal nature of human learning moved clearly into view along with a focus on lifelong learning and the search for identity. There was a re-thinking of adult education as a "lifetime-related cognition process" (Schmitz 1984), and the practice of *learning from others* began to take hold. This view – since extended to constructivist and systemic concepts of adult learning (cf. Arnold/ Siebert 2006; Arnold 2013) – anticipated what brain researchers have increasingly and unmistakably pointed out since the turn of the century concerning new learning. One brain researcher summarized these findings from a 2016 study as follows:

*"The extent of all internally triggered change depends on what patterns of response and reaction the person already has available and how efficiently they can activate and employ these patterns. This, in turn, depends on previous experience used in the past to solve similar problems and challenges and that has since become anchored as an appropriate response and reaction.*

*These previous experiences are essential if a person is to seriously consider and assess a change occurring in the external environment or internal world of the person – and whether or not it triggers a separate self-learning process. (...) All people develop their own*

*structurally anchored reaction and response patterns on the basis of the solutions experienced over the course of past development. These experiences are not objectively and equally important for everyone, but are important only to the person concerned. All learning processes are characterized by a subjective attribution of meaning. In summary, nothing can ever be learned if it is without meaning to the person." (Hüther 2016, p.45).*

The insight gained from the natural sciences reinforces a view long held in the theory and practice of adult education. This view of the teaching/learning process focuses on appropriation logic as a support movement of the subjective change processes. *The living world self is, to some extent, anchored in the "synaptic self" discussed in the natural sciences.* (LeDoux 2002). In both of these we find the unavoidable premise that the concept of controlling the input must first be overcome before effective learning and skill development can be stimulated, guided, and supported in the inside-out teaching logic. Competence development and the EU education policy are similarly guided by the didactic program: If there is input, there must also be an outcome.

Education yet-to-come must be initially confronted in its outline form. If we carefully follow the educational science debate in Europe, we cannot fail to notice the foundation of the educational institutions' claim to the specification of requirements is already starting to shake. If we give credence to the predictions of Ray Kurzweil, a change in living conditions, demands, and opportunities for people in the 21st century (which, in their intensity, closely approximate the changes of the past 20,000 years in human history), will force us to seriously modify the educational pillar of "learn from the past." We will have to shift away from the fixation on curricula content to strengthen the next generation as individuals, ensuring that they are truly able to master "new situations in a self-directed and appropriate manner" – as expressed in the definition of the concept of competence in the European framework of qualifications. Leading education theorists have already recognized that these concerns are in line with the concepts of formal educational theory, which seek a deeper explanation of how such abilities can actually be cultivated and promoted in the subjects. Those people who can only see the loss of proven concepts in this effort (Liessmann 2016; Türcke 2016) not only ignore and trivialize it, but also deny the evidence acknowledged by Keynes: "When the facts change, I change my mind... and what do you do?" (Damodaran 2012, p.4). By ignoring the evidence, education policy is created

in a "continue the way it has been" manner, which will not be convincing to anyone in the long run.

### **The future as a continuum: contemplating the biographic**

What do we currently know about the development and support of the skills needed for a self-directed management of new requirements – for not yet foreseeable situations? Again, very little focus beyond the "business as usual approach" has been given to this question in the European educational debate. It is frightening how little critical discussion takes place in the debate on the actual results of earlier educational practices: There is very little said of the scandalous lack of effectiveness of previous learning in curricular programs, in which the knowledge of several school years often fades away almost completely; nor is there any real discussion of the findings of brain researchers, that unanimously tell us:

*Even if we want to imagine and believe in our established patterns, until we break them up, it will not be possible to convey content, let alone competence!*

Facts point to the *need to establish a context for the self-structured appropriation of content*, whereby the focus is less on the control and teaching by an instructor and more on the counseling and support of the search process. It should be clear: We have to strengthen the concept of a "multi-dimensional education" as proposed in a recent essay titled "Education - More than Specialization" (Vereeniging 2015). In addition to teaching expert skills, a "multi-dimensional education" concept must strengthen "personality development, behavioral security, and character building of the next generation." This demands a kind of professionalism from those responsible that is better described as "learning support" than as the one-dimensional, back-to-back kind suggested by those who avoid the Keynesian question.

What are the requirements with respect to the role of the teacher as well as for the parents and trainers, in the lifelong learning process? It should be clear: We need a contemporary concept of learning. Learning can no longer be primarily defined as the result of teaching. In recent years, brain researchers and educators have focused on this emerging subject and speak of humans as the "animal capable of learning" (the adaptive species), which has always been able to adapt to the indications of the environment in self-



determined and creative ways – at least for the past 400,000 years and not just starting with the first teachers (first recorded instance approximately 2,000 B.C.).

When inquiring about the future, we cannot ignore our own temporal limitations and the question "What is human?" – a subject with a deep and tradition-rich history in pedagogy (which has lost favor today). Only from a non-self or selfless or "egoless" state can we gain access to an explanatory approach that can lead us beyond ourselves! We are not what we think, nor do we have to become what we would have been – according to the evidence of the "contemplative approach," as proposed by Francisco Varela and some representatives of the American pedagogy. They sketch out a form of knowing and shaping reality – their own internal and the supposedly external while showing us another image of the future in the pedagogic debate. Ultimately, the aim of the "contemplative approach" is to develop,

*"the ability to be able to clearly observe and utilize one's own subjectivity in an unbiased fashion" (Roth 2014, p.102).*

This approach is a departure from the common third-person approach as well as from the scientific observation which lets us look objectively at the world and talk about things with our random use of language. Instead, it relies increasingly on a first-person approach of careful observation as proposed in the phenomenology of Husserl and Merleau-Ponty and as it relates to the Buddhist or environmentalist concepts (cf. Karafilidis 2016, p. 227f). In this form of seeing, speaking, and acting, the use of language remains anchored in a reflective logic that enables self-referencing and self-criticism. A widely quoted thought from Ludwig Wittgenstein "From it seeming to me – or to everyone – to be so, it doesn't follow that it is so" (Wittgenstein 1984, p.119) explains why such contemplative seekers are constantly aware of their increasing ability to "manage" the mechanisms of their cognition and their language-dependent perceptions. In this context, Francisco Varela and others speak of a conscious and practiced "handle of cognition" that people use to consciously perceive, judge, and interact – ultimately, routinely and transparently – with how our perception, judgment, and language function (cf. Depraz/ Varela/ Vermersch 2002, p.155ff). People can see that they are lagging behind their potential and how their life follows repeatedly misunderstood patterns. Immanuel Kant's "sapere aude!" is another call for reflection and transformation (to interrupt) these patterns – a call for a deeper



approach to access the world, which has very little to do with the promises of advancement made in modern pedagogy.

At the forefront of such self-reflective and contemplative education concepts are *the* dimensions of personality and attitude formation, which Wilhelm von Humboldt presented as an alternative or, at least, as an equal alongside the material education theories. Such *personality formation* is concerned with

- Strengthening the ego and the potential of the individual,
  - Promoting its justified positioning as to what life actually means,
  - Advancing self-empowered education and self-learning skills (as we like to say today). This requires social access to supporting contexts, but also needs embedding in the emotional experiences of appreciation and self-empowerment (efficacy) and the context of life.

Such education is less concerned with transferring specific knowledge than with the promotion of an inner attitude, capable of questioning its own beliefs and constantly seeking new, appropriate, and feasible answers. This kind of attitude formation relies on the contemplative abilities of the individual related to themselves and the world around them. For example, the ability

- to fully focus your attention without the distorting whisperings of your ideas,
- to set aside your own assumptions and opinions,
- to gain insights, deeper connections with others, their needs and situations,
- to have empathy and compassion as well as respect for the lives and views of others,
- to express trust and intimacy,
- to form a more holistic and integrated perception of causal relationships, and
- to have deeper and more active participation with others (cf. Gunnlaugson et al. 2014, p. 5).

The sustainable development of these abilities has more to do with emotional adjustments made throughout your biographic development phases than with the content of teaching plans and curricula. In later development phases, the biographic characteristics can still be socialized through self-examination and guided exercises, although the original forms of dealing with yourself and the world can rarely be completely overcome. In any

case, such attitude formation demands reflective learning that encourages seeking and self-awareness, since both are, ultimately, what subtly determine the way we acquire and manage knowledge.

Those who are unable to develop these so called contemplative abilities tend to adopt a world view that "objectively" describes the world and other people in the belief that all can be technically mastered. In contrast, a self-reflectivecontemplative education favors the formation of a subjective awareness, which in other concepts and behavioral patterns is seen only as an expression of the human search. Contemplative thinkers do not ask later on who is right; they simply try to identify the patterns activated when dealing with themselves and others in the world, in order to improve the reciprocal connectivity. They are masters of seeking, not finding. They are not very good at arguing over who is right. Rather, they are always seeking awareness of the kind Socrates demonstrated when he said: "I know that I know *nothing*." Only the supposed knowledgeable person hopes for more knowledge and greater opportunities whereas, those less aware are skepticalof the hardening effect of their beliefs, which can put them in a trance and keep them from continuing the search.

Personality formation is not just an idea, but rather a program – in fact, a rather important one. It contains the notion that a person can set out on their own along a path to become the person they could be (cf. Arnold 2017). This formulation may seem nebulous and ambitious and perhaps even sounds more like a constant effort than an achievement; but it nevertheless brings focus to the idea of self-empowered education – a movement supported by a vital interest to learn "what the world looks like through different eyes" and how we can, "expand our own field of vision in this way" (Spaemann 1994/95, p. 34). This change of perspective is at the center of concept of freedom, as Carolin Emcke, winner of the 2016 Peace Prize of the German Book Trade emphasized in her address. It should be clear just like freedom demands education – education without freedom is unthinkable. She said:

*"We can no longer be permitted to merely claim to be a free, secular, and democratic society: we have to actually be it. Freedom is not something one owns; instead it is something one does. Secularization is not something we can finish; instead, it is an unfinished project. Democracy is not a static certainty; instead, it is a dynamic exercise in dealing with*

*uncertainty and criticism. A free, secular and democratic society is something we must learn again and again. By listening to each other, thinking about each other, and becoming active together in word and deed; In mutual respect for the diversity of ways of belonging and individual uniqueness. And, last but not least, in reciprocal admission of our weaknesses and our ability to grant forgiveness.*

*Is this difficult? Yes, absolutely. Will there be conflicts between different practices and beliefs? Yes, certainly. Will it be tricky to create an equitable balance between different religious references and the secular order? Definitely. But why indeed should it be easy? We can always start again. What is it going to take to do this? Not much: some strength of character, some cheerful courage and, last but not least, the willingness to change one's perspective so that more and more of us find ourselves saying: Wow. So this is what it looks like from up here"(Emcke 2016).*

Such self-reflection in a contemplative speech is not new, yet it is not taught. While it is true that self-reflective theories and our knowledge of language-bound mechanisms influencing our perceptions are not new developments, it is also true that despite the many references in linguistic philosophy, cognitive and brain research, and meditation studies in our professional and private daily routines, we generally pretend that these hold no significance for our thinking, feeling, speaking and acting. The wise management of the transparent mechanisms of cognition and emotion is not yet a widespread art. Exactly this art helps us to rethink our biographical possibilities with *new* concepts and to learn greater *self-distancing* from our past experiences. Acquiring and practicing this art is an "inside-job." That is, it can lead to us new forms of reflection that trace the self-mechanisms that manage our inner vitality – another aspect of continuing education, and obtainable only through practice (cf. Arnold 2017). This is personality development in a reflective and transformative sense – much like the fundamental definition of adult education in Germany, which defined education as "the constant effort to understand the self and the world and to act in accordance with this understanding" (cf. Arnold/ Nuissl/ Rohs 2017).

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