EDUCATION OF THE ARCHITECT.
TWO APPROACHES TOWARDS POSSIBLE PLACES OF CAD.

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Abstract
This paper discusses the limitations of the most of educational systems of the present, which seem to be no longer sufficient to face the problems of the modern world. This concerns as well architectural education. Computer Aided Design is considered here as a specific case in a wider context of general goals of education. The linear, memory based, cause - effect model of education, where remembering of final effects of the processes is the criterion of teaching efficiency, does not respond to the growing complexity of problems. The task for today is to develop the individual ability to synthesise and creatively explore spheres between separate fields and reconsider the issue of values. This paper therefore emphasises the importance of the person in education, seeing the problem of its full development as a new base and final aim for education as a whole.

Knowing, that the field and "institution" of education as a whole is a very important and integral part of our culture, society, politics, it is the sphere where the sources of intellectual development in general are rooted, we can conclude that this "institution" is also one of the basic components of shaping the very individual consciousness of the world, very individual perception and ways of understanding it, ways of finding the individual place and role in it - almost on every level. So it shapes the person. In the strange moment in which our culture actually is, when some change in our visions of the world is taking place - the question of how we should educate and how we should be educated must be asked. First - generally, then in relation to architecture. Architecture, as a dynamic, not static sphere, socially involved, either is subordinated to changes or takes part, inspires and answers them. Appreciation of the value of the real inspiration, evaluation (the need of seeing values which we use is not always obvious) and interpretation (according to values and rules we accept or establish) - can make this transformation neither random nor blind. It also will help us participate in changes more consciously.
At first I would like to discuss a little more the general idea of the conference itself. I found it wide and, let's say, deep. 'Education for Practice' - at first glimpse - everything's seems to be clear and straightforward: how to set the teaching - learning processes and structures to fit their 'products' into real needs and how to help those who are to be educated to find themselves in the worlds of their professions. This is the first direct impression of my own on the problem given in the title.
On the other hand I found that we have to think more of the components of this - to fix a base for a reasonable approach to the sphere these components perform together. I think of an 'education' component and a 'practice' component with some additional ones, which emerge from 'between'.

1. EDUCATION

Generally, one could say it is just the process of giving and getting knowledge. The scheme could be like this: the one, who has certain knowledge gives it to the other, who does not have it - in order to let the one without it acquire it. Or the one without knowledge reaches the source where it is 'placed' to possess it. So there is a teacher and a student. There is also the relationship between them: the teaching - learning relationship. It seems there are two distinct kinds of it:

I. direct - via personal contact between teacher and student

II. indirect - student 'meets' teacher and his knowledge via media (mainly books) prepared by the teacher.

This distinction, seeming to be obvious, is false, because every relationship is indirect in nature - there is no way to avoid agents or media. What is to be explained here is that it is the sphere of exchange and mediation. Understanding of this fact is extremely important to the whole process of education, no matter of specific domain, because it involves all these substantial issues as: methodology, understanding, awareness, communication, etc. This also shows basic, though simplified, inherent 'fields' of educating: the field, where the knowledge IS already located and the field, where it IS TO BE transferred, so there is a motion. These fields overlap - the sphere 'between' those, let's say, opposite locations is the most dynamic sphere of knowledge. The field of transition, where knowledge is never static - either inside those who 'have' it or those who get it. Even when the world itself is a teacher. Static is information, unless it imposes involvement. It requires transmission. Knowledge is in constant transition or rather transition (as motion and transformation) is an inherent feature of knowledge. Knowledge is dynamic. A side of life.

In the space between a teacher and a student the process of interpretation and transformation is to develop. It is where the knowledge can be developed most efficiently and can act in both directions - into a student as well as into a teacher. Interpretation and transformation concerns either the subject being taught-learnt or both participants. Therefore it is also the sphere of development of the person. It would be required, if the knowledge acquired is in some way different - not distorted, but unfolded, proceeded - from the "one" being transferred and when participants of this transition mentally grow up, progressively change. This of course depends on many conditions - but the basic one is the active attitude to the widely understood knowledge of both sides of the teaching - learning process.

Here, some addition to the notion of knowledge should be expressed. I see it not as a sum of information related to a specific field, but as a dynamic process, itself being in constant motion. This motion is not linear - even within one field. Therefore this notion of knowledge also contains the ability of creative interpretation and transformation of information and possibility of simultaneously holistic or fragmented seeing it in the relation of every needed context. It is a very difficult skill, because it is not possible to define one efficient methodology for the teaching-learning processes.

But knowledge is not only information. The process of educating is complex - it needs time to get the information and needs a friendly environment to interpret and transform it. So education is not transferring the knowledge but developing it. Hence it seems that the product of education is the knowledge developed in the student and in the teacher. Yet this is not the full picture.

Participants of this process of developing are both: student and teacher, being always in an indirect relation. The first problem needing discussion is - how to define the sphere between: student - teacher, information - knowledge, acquiring - transferring - transforming. ‘Between’ is the essence of the process.

2. WHAT IS BETWEEN?

It is, generally, no problem to speak or write of the 'between' - one can put everything there and enjoy the game with words. On the other hand - one cannot deny that the sphere of mutually interrelated mental and emotional processes is a fact, even when it has no precise boundaries defined (one finds very individual, often surprising sources of inspiration) and even no cohesive theory established. 'Between' is the part of reality - even when we have to use words which make us and others suspicious.

Between is the space, the distance: teacher's - student's thoughts, language, imagination, logic, motivation. It is also the mass of information being in constant motion, the infinite process of inner and outer mental events as a result of acting, thinking, logic, chance, emotion.

Between is silence to be filled, noise to be given a shape, mess to be ordered, order to be restructured. There is at least one mind to be sufficiently open. There is distance to be gone through, to be overcome. Thresholds.

Between is the sphere of the method - where so much is dependent on the contents of every method. There is a space between the convention and innovation (where both are very important) - within one's mind, very inner and individual, with influences of the previous experiences and personal relation to the world.

Between are also the media (*"'content' of any medium is always another medium"* M. McLuhan, 1964). Language: spoken, written, its form and essence. Means of communication. Yes, in general, we could say that 'between' is the domain of communication, communication understood very widely: as a sphere of conscious and unconscious exchange, being in touch, being connected. This connecting concerns what we want to transfer or get, as well as the events and effects which inevitably and unequivocally appear during this exchange. Jacques Derrida (1972) also indicates that organised ways of communication are being established, thanks to language games, among different functions of the word, and within the language, between different layers and regions of culture. So my conclusion is that we are not able to limit our 'transmission' or 'receiving' only to our intentions and expectations, because, similarly to the development scheme, transmission (exchange, connecting) is never linear or direct. Even when it is intended to be. It always involves our memory, experiences or lack of them - let us call the 'subjectives', and all the facts which re-act on us, as natural processes of living in the complex, non-mechanically acting reality - 'objectives'.

Therefore 'between' is not only the matter of intuition. It is the matter of the REAL.

In the teaching-learning processes the 'between' was neglected - and it was a natural consequence of mechanical vision of the world and communication with direct, linear understanding of development, as a commitment to binary relation: cause - result and the vacuum between them.

‘Between’ is a key in solving many problems concerned to distortions of transmission - receiving processes, i.e. here: teaching - learning sphere. In education systems now there is a very wide margin for misunderstanding and a very narrow one for interpretation and innovation. Many problems appear when understanding of basic issues takes too much time and energy, because the level of transmission from the source is not suited to the level of the

receiver - so the distance between them increases. It is one kind of balance I want to mention, which is the awareness of the distance scale. Another one is between the 'amount' or sort of knowledge to be acquired correctly and this part which can be or should be interpreted individually. There are almost always these two spheres in every 'piece' of knowledge being transmitted. It has always taken a lot of time for me to find the difference between them. This distinction is important.

Education is a memory based institution, where remembering capacity plays a leading role as a criterion of individual evaluation and teaching efficiency. It is a direct consequence of action - reaction, cause - effect philosophy. Now, I think, there is a need to pay attention to process based teaching, exploring the space between the cause and the effect as a way to understand the processes, appreciating individual thinking, to teach and learn how to see the problem, how to approach it, how to construct, re-construct or deconstruct methods. It does not mean that memory and the remembering of facts are not important, but they really do play the secondary role, because the need for direct information can always be solved (especially when nowadays systems of external memory and media are in the easy access) when we know where and how this information is to be used.
So, between is also the field which enriches the method. Methods 'aware' of the 'between' see (should see) the above distinction. Therefore teachers aware of the 'between' also see it. It is essential for educators to transmit clearly the part to be acquired correctly and to indicate every possible field for interpretation and transformation.

3. THE PERSON

What was explained above indicates that gaining knowledge cannot be separated from the general, full development of the person. We ask the question with what skills students should be equipped to face the reality of their professions and the complex problems of the modern world. It is the general question of understanding the reality, the world, other people, society and the self. This connection should not be forgotten. In fact it has. Abraham Maslow explains it quite clearly: *'education can no longer be considered essentially or only a learning process; it is now also a character training, a person-training process'*, therefore: *'what I am really interested in is the new kind of education which we must develop which moves toward fostering the new kind of human being that we need, the process person, the creative person, the improvising person, the self trusting, courageous person, the autonomous person'*. (A Maslow, 1971). The problem of today is not the problem of practical skills or the amount of information to be acquired - achieving it is always possible, current system is based on this fragmented method. Even an individual human being is perceived as a set of separate pieces, which can generally be distinguished by the mind - body division.
Kenneth M. Sayre concludes that *"our clearest indication that the mind - body problem still lacks an adequate ontological solution is the isolation of the physical sciences from the sciences of man"* and *"the mind - body problem will not be resolved merely by providing a conceptual framework in which these two sides of man can be intelligibly related; it will be necessary to account for their mutual influence as well"* (K.M. Sayre, 1976). Here the issue is every person as a unity and his ability to find his own place and constructive role in the world, the world he could call his world. A. Maslow says that we need a Good Person to have a Good Society, (and vice versa) *'This Good Person can be equally called self-evolving person, the responsible-for-himself-and-his-own-evolution person, the fully illuminated or awakened or perspicuous man, the fully human person, the self-actualising person* (A. Maslow, 1973). Here lies the essence.

Person oriented education requires very deep and general changes in the whole teaching-learning system. Facts are useless, when we are not able really to see, understand and interpret them.

4. PRACTICE - THE REAL.

The chapters of the between and of the person are the most important components of my understanding of the real in education. So there is no way to avoid the question of the real. Material, quantifiable and practical is not the full reality. We can say it in other words: even when everything is measurable and quantifiable (as for example mental processes can be described as bio-chemical reactions), the process of observation and measurement changes the object being measured (something like Heisenberg's uncertainty principle), so its REAL state seems to be in constant change. It is not to say that the view is relativistic, but that we are at the threshold of new understanding of the real, which will have to be located in the wider context, including values, qualities, states and probably - intuition and emotions, which were separated as not measurable and concrete. The border between material and immaterial is moving. As it seems to be obvious (even since of the 1930s) - the universe can no longer be perceived as a big machine, but rather as a great thought. Fritjof Capra has written that:*"in atomic physics the sharp Cartesian division between mind and matter, between the observer and the observed, can no longer be maintained. We can never speak about nature without, at the same time, speaking about ourselves."* (F. Capra, 1982).

But let's have a look at some definitions of the 'real'. In Shorter Oxford English Dictionary, among others , we can find two, which are basic to me. So real is:

1. a real thing; a thing having a real existence, either in the ordinary or in metaphysical sense; (so real is real?)
2. actually existing or present as a state or quality of things;

Present state and quality of things can be perceived as a result of mutual interrelation between them and of an infinite number of inner or outer events and processes acting on and off them. Hence real existence of a specific field can be seen as a part of the dynamic process, which includes every property, which can concern it.

Now I would like to discuss the specific field, which in this case is architecture.

5. ARCHITECTURE.

What I have written before is also to say that we should not limit the notions of the fields we are involved in. When I think of architecture, I think either of profession - concerning the practice of material construction of buildings, as a craft, or I think of art of forming of the matter, of space, of environment, I think of social structures of which it is the part, I think of the essence (essences...) it expresses either in buildings or in abstract ideas, which live mainly in texts and drawings but also act as a real creative power. As such, it is also a part of the world, it is one of 'creatures' which is the answer on the rational and emotional needs of the existence of humans, firmly etched into the complex whole of their physical, mental and spiritual activities and desires. We can see it this way especially now, when we face the limitations of technical and specialisation based civilisation of western rationalism and the need to explore interrelations between the fields and to understand their internal components. Architecture is not a separated label, file or draw, but a sphere with various, external (economic, technical, etc.) and internal (emotional, expressive, artistic, formal, etc.) connections and joint fields with other fields and disciplines. Real architecture is the whole architecture.

One could say, of course, that such a definition is an impossible definition. Yes, in terms of linear, structural ordering, it is impossible (the impossible, is the challenge for creativity...). But

only as such it can belong to the real, multilayered world of relations, mutual interactions, the complex reality, which must be approximated in order to be perceived sensually.
How to deal with this impossibility, complexity either in terms of my own personal development or thinking of professional education? I would be lying if I said that I had a full answer. I am in the process of searching and I find that I can not separate my own personality (personal opinion, reactions, emotions, interpretation) from considering this problem. It is probably a mental extension of Heisenberg principle of uncertainty - where the involvement of my own thought influences the contents and essence of the discourse...
What I am going to say is that we will not find one rational answer and solution to what should be present or future architecture, design process and methods which would fulfil real needs of related parts of the world - if we just look for the solution which is 'outside', somewhere out of the person, not involving his personality (soul?). In fact, the various processes of the "full" reality break into the very inner spheres of ourselves. That is why solutions must deal with these spheres too. Of course it seems to be mutually dangerous to deal with ones personality. But the issue is neither to interfere with the personal, inner life of the student, nor to pretend that this sphere is marginal. There are emotions, needs, which lie untouched or damaged, which could be the field of the individual creative attitude of the student himself, but they must be perceived, appreciated and wisely involved into an education process. It is where a very important part of what we try to find is 'located'. Again the notion of the between must appear. Essentially we are between: our body, senses, thoughts, emotions, beliefs - and they all interconnect, interrelate, interact - first, within themselves and then with the surrounding world.

6. INCONSISTENCY.
Architecture concerns building. Every building when it is constructed is a very sensual thing, i.e. perceivable via our senses, with its structure, elements, function, infrastructure, etc. Material construction is involved in social, financial, political structures of the reality. These, in general are ruled by very rational principles, principles, which were accepted as a mechanisms of the market economy, objective laws of material development - we could say that this (though simplified here) scheme suits every discipline. This scheme also imposes general patterns of behaviour, thinking and decision making nowadays. So architecture 'behaves' according to this scheme. Consequently, it includes education, which is subordinated to the same scheme. Basically this conforms to the vision of the world which was accepted in that moment in history, when this scheme seemed to promise a solution for the future of the world. That is why technical progress, which is the main product of linear, cause - effect rationalism, was and still is promoted as a best cure for almost every disease of modern civilisation. Of course it has brought changes, many of them positive, but also caused general alienation, separation of everything from everything, specialisation, which has come to its own limits.
In architecture it caused a paradoxical inconsistency between so called practice and intellectual theory. They meet each other very rarely. Generally, so called practice is subordinated to the processes described above, where economy and simplified pragmatism play a deciding role. Quality is measured by economic and functional criteria, so most of our towns and living spaces are created according to this rule. Theory, on the other hand is, in general, in constant search for the artistic expression, treating it as a kind of peak experience, the final and absolute measure of the value of the object with the tendency of endless labelling. We could even accept that the real architecture is (this) of artistic importance, but there are at least two general doubts. First is that the basic criterion in artistic evaluation is newness and otherness. This really indicates that we put our system of intellectual values on the very unstable ground. The second doubt concludes in the question: what about the majority of buildings being designed?
* With what criteria shall they be estimated: practical or intellectual?

* Is it convenient to have two completely separated systems of values in the one field?
* What about the space, distance between them?
* Is it possible to have one system, even complex? Do we really need it?
* Which system to accept as the base for education?

I think that none of these questions is really important, because even when some awareness of this complexity appears, it touches only parts *("as we discover more information and even greater complexity and, in turn ... ever more complicated legal liability, the need to rethink our approaches has become urgent"* S. Groak, 1992). They all, as both almost dialectically and artificially opposed attitudes, carefully avoid those forgotten unmeasurable issues, which were mentioned here before.

7. A SPECIFIC CASE - COMPUTER AIDED ARCHITECTURAL DESIGN.

Architecture nowadays is deeply changing by the electronic technology, which mainly concerns introduction of computer technology into the domain of architectural design. Computer technology (including networking), offers the new and still not completely known sphere (environment) to work in. This is still the sphere, which can be called the sphere of possibilities, the adaptive sphere, which can be used, adapted for different purposes and in various ways. Therefore we still face a pursuit of inventing new needs and so - new uses FOR this new environment. Environment, which causes new communicational (cultural?) paradigm.

Thus there still is the problem of how to find a place for computers in architectural education. In the context of what was written before (problem of the 'between', the person in education, inconsistency within the understanding of architecture) finding the solution seems to be impossible. When we ask the question of education in CAAD for practice, first we face the real problem of unavoidability and must to reconfigure both: education and understanding of practice. It cannot be solved now.

However, I believe that the key for this reconfiguration lies in appreciation of full personal development as a general aim of education - architectural one too. Keeping this in mind we can model two actually possible approaches to the problem of professional education:

* Development of the individual is a secondary (and accidental) outcome of education. Education should linearly serve the actual practice of the profession.	**The full development of the individual, as a primary goal of education, leads to a full evolvement of the subjective, personal features of the educated person in order to enrich, strengthen and support the objective practical problems solving i.e. practical experience.
In such case the word 'education' should be replaced with 'training', which is to get the efficient 'amount' of information, or manual skills with procedures how to use it in order to fulfil the pragmatic requirements of the market of the profession. Learning CAAD in this situation is getting possibly a highest level of manual skills in operating the design oriented software. CAAD education here is just software (probably the most popular on the architectural design market) usage courses. Generally the concrete curriculums of such courses are not very essential for architecture itself or the student.	Here, via professional education and later - profession, the full development of individual performs. Individual features, talents, interpretation (analysing, synthesising) abilities, skills to act creatively in various situations are appreciated and developed in the context of a given profession. In architecture, this would be based on developing an active, creative and individual attitude to various aspects of the field of architecture, not just profession. In this pattern, CAAD is the sphere of exploration, development of new possibilities for architecture and various aspects of design. This could be done by possibly free access to

> computers also as experiment devices for design, formal exercises, structural analyses, etc., where the student opens himself for the new possibilities he/she discovers, appreciating creative surprises as a result an active dialogue with this specific device;

Using Glanville's (1993, 1995) distinction of attitudes to computing, we could say that the first model of education presented here uses computer as a tool, second - as a medium. Probably a medium approach to computing, where computing is participating in the process of development can be a wide and general indication in searching for architectural CAD education models for the present and for the future (*'this can help us get beyond the limitations of our own imaginings, for we are all somehow trapped in and by the limitations of our imaginations, no matter how wonderful'* Glanville, 1995).
But there are no medium without user-receiver (Jakimowicz, 1995), because in fact receiver defines his medium, by an active, creative attitude. Therefore the person is what (who) is important - either in education or in the profession. Development depends on creative persons.

Architecture would last and develop without computers. However, economy and market forces architectural firms to use them. On the other hand, intelligent, creative, sensible use of computers introduces completely new values to architecture, developing it in directions which would not be possible otherwise. This is what excites - and what worth is the profession which does not excite?

8. THE TASK, THE CHOICE, THE FREEDOM.

Overall development requires figuring out and naming tasks relating to the general condition of our culture, present and future needs and problems to solve - it is obvious and probably we are aware of many of them. Patterns of social life, global co-operation, mechanisms of conflicts solving, ecology, economic growth and stability, distribution of goods, patterns of freedom, ways of individual and social progress, etc. I am sure that they will never be solved unless we touch and dare to reconsider the modern notion of humanity, patterns of intellectual values, patterns of improvement and their relation to the very inner side of every personal life. This last notion does not mean that a common pattern of improving ones psychic is proposed here. But this is an essential challenge for education. Again - some limits, borders are reached, borders of certain system of values. Accepted pattern of intellectual, scientific development (considered a source and base of general progress) is based in general on doubting and scepticism. Nothing can be accepted as a fact unless it is rationally proved. This pattern is not wrong, but is no longer sufficient as a way of explaining the complexity of life consisting of the matter unseparably interrelated either with each individual intellect or psychic, spiritual side of existence (spirituality is real, isn't it?). In fact, matter itself is the process. Intuitionally we FEEL it, and some desperately and obligatory state that this complexity and strange evolution can be the work of the blind watchmaker.
Another consequence of this scepticism based system is that it imposes distance from the subject of thought and activity and locates the observer outside. Yes, observer - this role appears automatically. In this system the position of participant is very hard to achieve. Was M. McLuhan wrong when he wrote of the role of the media that *"our new environment compels commitment and participation. We have become irrevocably involved with, and responsible for each other"*(M. McLuhan, 1967)? The intention was nice, but as we have already learnt, observation is not equivalent to participation. The media provides just tools for observation, and exchange of information, which are never able to locate themselves and the observer inside the process. The position outside is rather the position of controlling (?!), interpreting, not participating in the real sense. It does not even let the one participate fully in very private, inner self-development, treating it as a sphere, where rational thinking, as its own product, is not a sufficient tool (like medium?) for dealing with the producer. So this position will

never give the way for the generalisation. We could call the very early discourse between sophists' and Plato's attitude to the knowledge, one - acquaintory, introductory, second - participatory, where, as Derrida explains, the discovery of writing, (medium!) caused a danger to base the sciences, so knowledge too, on this superficial level of recognition. It involves again the problem of memory and remembering. Plato was attacking sophists for their system of simplifying the memory and replacing *alive*, participatory memory with its assisting, prothesis, replacing the active reviving the knowledge with mechanic, passive remembering.

There is a need for overall discussion of this limit. This statement is not intended to be the advertisement of the great unification theory, looking for a new paradigm, intuitionism or my religion. It is just to say that outside, within the reach of the senses, there is only a part of the answers we look for. This fact can not be left unseen in education, because it is a real one. In fact, we are between our senses and the real, complex world. And the place we are in, and as we (can) see it, requires reinterpretation and re-participation. Almost everything 'speaks' of crossing the borders.

Many examples of modern art come very close to scientific experiments, exploring, often intuitively and emotionally, the nature of the world and the human nature and emphasising very personal experience, which can not be judged objectively. On the other hand the truth of the new technologies and media, which permeate also into everyday life, is that they not only serve as improved extensions of our skills and abilities, but very deeply change the perception and notions of the reality (*"thus the age of anxiety and of electronic media is also the age of unconscious and of apathy. But it is strikingly the age of consciousness of unconscious , in addition"*. M. Mc Luhan, 1964).

But the blind pursuit for experiences in terms of newness and otherness will bring nothing essentially new, unless it helps us come to conclusions, which can be a constructive part of the process of joining separated and inconsistent, but related parts of every field, including our own, fuller understanding of ourselves. This also requires the new recovery of universal values *("this is a question about the behaviour of those who do in fact propose and make changes. People act to improve the world and to progress towards a better way of life for good reasons, and among the reasons are certain consequences of their behaviour, and among these consequences are the things people value and call good"*. B. F. Skinner, 1971), because there surely are some borders which should not be crossed and extreme elements, which should not be joined together. And even if our genes are really selfish and the very deep cause of our own behaviour is our own good and profit, we are
aware that our own good can also be a profit of others (and profit of others can be our own good).

I, therefore, do not believe that present education systems, in whose I personally participate, will even touch the issue of its own fundamental aims. Some of these aims lie in the question of a person, in his own understanding of his own place in the world, ability of creative attitude to every side of his own life. The ability to act constructively requires the full development of the

person, including every sphere, which could influence his behaviour in relation to himself, his needs, and to surrounding world *("we do not need to predict the future to see some of the ways in which the strength of a culture depends upon the behaviour of its members".* B.F. Skinner, 1971). Education does not help us to find it and I see it as a mistake that it does not even try. It is a matter of the overall developing of the personality, where in fact, the spheres between have the influence on the shape of the parts, elements and pieces. This ability to treat ourselves creatively as well as the world in which we participate - is the REAL problem of education systems nowadays.
The final aim is not only knowledge, or development of the world outside, or external solutions for external problems, but first of all - the full development of the person. This means the need to release the kind of creativity which concerns its whole, where the specific profession is its component, a concrete way of life. *"We must teach and train engineers not in the old and standard sense, but in the new sense, i.e.'creative' engineers"*(A. Maslow, 1973).
This should lead us to the final product of education nowadays, which should be, using Maslow's words again *"the Good Person',* which *'can be equally called self-evolving person, the responsible-for-himself-and-his-own-evolution person, the fully illuminated or awakened or perspicuous man, the fully human person, the self-actualising person* (A. Maslow, 1973): student as well as a teacher.
I think it is a good conclusion.

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