Word and picture in education

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“Before the world was created, the word already existed; he was with God, and he was the same as God. From the very beginning the word was with God. Through him God made all things; not one thing in all creation was made without him. The word was the source of life, and this life brought light to mankind. ...” St. John 1.1-5 (Good News Bible, The Bible Societies, Collins/Fontana 1976)

Education is an authority, it is a power. The power of independence and freedom first for teachers and then for their students. Teachers are responsible for an intellectual formation of students, who will build the future world. The teachers decide whether they become creative people or only well instructed members of society. We are used to treat the education as a process of discovering and extending, but it can either be a process of covering and distributing only a selected part of knowledge.

In my text I am trying to present a “picture” and a “word” as symbols of two kinds of transferring information, two kinds of culture, and education. The division line goes between teaching instructions (“pictures”) and teaching ideas (“words”). I am undertaking that subject because of the fact, that our life is more and more dominated by consumption, subordination to technology, and overproduction of senseless information. People are losing their individuality. Our civilisation becomes very superficial and “pictorial”.

I belong to the “books generation”, probably it is the last generation for whom the books are so important. I am conscious of that, and that is why I am trying to emphasise the importance of a “word” for a contemporary world, and for education.

1. What education is?

For purposes of my presentation I distinguish two ways of teaching, which can be treated as two sides of the same process, but in this place I intentionally emphasise the differences, and consider them separately.

According to that agreement, I am dividing each paragraph onto two parts, which are related to that basic division.

1.1. First way is teaching practical skills. It is simply giving an answer “what should I do to do something?”. This is the basic way of being taught. For majority of people this is the only way they know.

The first way is simply teaching facts, it is teaching for memory.

1.2. The second way is teaching ideas. The basic question is not “what?” but “why?” and “how?”. It is searching for the reasons (beginnings) not for the results (end). One can say this is teaching philosophy, and I will agree, however I would rather say that this talking stories in a way expressed by Neil Postman in his book “Technopol”.

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The second way is teaching for intellect.

I am deeply persuaded that the second way is at least as important as the first one, and both of them should be taught coherently. Education can be like flying. First you have to wake up the desire to fly, and then you can effectively talk about wings.

2. Word and picture in education.

From the first lessons in our life we meet words and pictures which participate together in a process of education, however each of them has different meaning. In this text I treat them as symbols of two ways (or two sides) of teaching expressed above, and once again I will concentrate onto the dissimilarities between them to emphasise theirs individuality.

2.1. Picture is where light is. It is the fact which occurs as a ready answer, fully prepared for consumption by our senses and mind. Picture is outside. The basic role of a picture is illustrating. The “picture” is teaching in the first way (teaching facts) - by showing what picture represent. Picture talks to memory (have you seen it before?).

2.2. Word is where discussion is. It is a medium of conversation, which means exchange. So it is something which is in between. Word engages intellect, and initiates a mental process. Word is a part of a language, which is a system of ideas which belongs to a group of people. Word is an idea which builds in our mind a picture of an expressed notion. It is a tool of telling stories, so it is teaching in the second way (teaching ideas).

By words one can see in his mind the pictures of things which he has never seen before, or which does not exist at all.

Picture was observed, word was invented. The basic difference between word and picture is the attitude. Word requires engagement and it causes a creative attitude. Picture is basically passive and superficial.

Of course picture can express an idea and can be an active part of conversation (this is art and architecture) however those qualities are not immanent for a picture.

3. Education and practice..

3.1. That, what was described as 1st way of teaching (teaching “pictures”) complies with the demands of practice - there are the same imperatives of effectiveness, and attention to facts, numbers etc...

Practical attitude is based on willing to make things easier, sparing time and effort. Everything is judged by the economy.

3.2. The second way (teaching “ideas”) seems to be in conflict with practice from the point of view of productivity. It builds first the mental abilities of a student (effectiveness “inside”), not practical and physical abilities which are effective “outside”.

Learning in this way cost a lot of effort, which is its indispensable quality.

I want to stress out the importance of the “second way of teaching”, especially for the architects. To educate a creative person it is necessary to teach ideas.
4. Teaching architecture.

In my opinion architecture is not only a “picture”, and it never was. There is always a kind of ideological context, which is expressed by architecture (or simply by a building). Through centuries the first ideological information of architecture was willing to preserve power and authority, by creating a space distance between those, who have more power and those who have less power. Nowadays this context is still present, however there are a lot of other ideas expressed by contemporary architecture including “having fun”.

In this way each building is “telling stories” (in the worst case the short story about an architect who has nothing interesting to say).

Architecture is first having an idea, and then executing this idea in reality. Idea comes from telling stories, it is thinking itself, so it comes from a “word”. Executing is a process of incorporating an idea, building “pictures”.

The student’s time is very precious, so the question what they are taught is the very basic one. Is it important to teach drafting techniques and technology of building houses? Probably the answer is "yes", however we can discuss do the practice in an architectural office or at the place of building a house is not better and more effective. Anyway this is a part of education of a craftsman, who is learned how to produce a technical documentation, or how to build a house. What about having ideas? What about creativeness?

University studies should build after all an intellectual formation of a student, which means to equip him with a critical sense of asking, observing and judging everything what happens.


5.1. Teaching with the computer - preparation for practical job.

The computer belongs to the world of practice. It is after all a tool, which makes the production more effective. For an architect the computer became a very useful and helpful tool in his work. Every day the CAAD sphere is extending itself, and become more popular among architects. From the point of view of education, teaching CAAD is a part of “picture” tradition. At the faculties of architecture on all over the world students are training skills, which are necessary to practice CAAD. This kind of contact with computers gives them a knowledge “what to do to do something”. That is clear that the computer helps a lot during the process of executing idea, building "pictures. Maybe thanks to that students are more “productive” as future workers, but the question is still the same: what about creativeness? What about looking for ideas?

The development of CAAD software and hardware tends to simplify the work with the computers. The magic word “user friendly” explains it in the best way. I suspect it means that the computers became more “clever”, than the average user. For teaching CAAD the consequence is, that soon, there will be no need to employ teachers, who would be replaced by the computerised media. The students will learn themselves in the “intuitive” and “interactive” cyber-space.

5.2. Computer - a gateway to understand a contemporary world.

There is a number of questions which presents the more general context of the computer presence in our life and education. May the computer become an active element of teaching? Is the computer able to surprise us? Can it force us to ask? Can it force us to have a critical look at
the results of our work? The answers for that questions depend both on teachers and theirs students.

The first thing is that we do not need to do something easier or quicker, we do not look for productivity or efficiency. We do not need the great power of computer, fast processors and hard discs of high capacity. We do not have to treat the computer as a tool. We are able to consider it as our “partner”. I propose to concentrate onto the computer itself.

- I remember my first contact with the computer - the curiosity “how it works?”. I am sure that everybody is asking himself the same question. Why not to try to find the answer for that question? I know, that the answer for such question is far away from the field of professional interest of an architect, and that's good, because this is a possibility to train an intelligence and extend intellect. To keep the brain in good condition it is necessary to have something to think about.

- The next question is: “in what way the computer programs are written?”. Both those questions are good occasion to propose teaching architect the elements of computer sciences. It is time to break the monopoly of computer science engineers, who have crowded the world with the computers, and terrorise "normal" people.

- I am sure that on the majority of universities, students are taught the most recent, and the most popular versions of CAAD software. My idea is to teach the history (or even also the prehistory) of CAAD. I recently have found the reference manual for an early version of one of the most popular CAAD software (wrote in 1988). I felt a deep affection similar to the emotion of watching the old photos - the remarks of the times which have passed.

- Next proposition is to concentrate not onto the advantages and strength sides of CAAD software, but looking for the weakness of it. This is the exercise for training the critical sense, which is the beginning of an active attitude. I believe that it is very important that even the best machines which we can have are not perfect. The intelligent man never stops trying to do something better.

The ideas presented above can be a part of a special course for students. The aim of that course is to develop the natural (I believe) ability and willing to learn more than it is indispensable for practical life. I trust, that there are still students, who would like to study that course.

6. Conclusion

Our world is dominated by the machines which become every day more and more “clever”. That wisdom of an “intelligent” devices relieves people from necessity of having any kind of knowledge. We can expect that moment when we reduce education to teach only one thing - how to press a button. I am probably magnifying that situation, but the fact is that our work and our life become more and more easy and mechanical. If the conditions starts to be comfortable, the degeneration begins.

People do not need to be well educated, when all knowledge is possessed by the computers. Internet and multimedia are tools to store information - “pictures”. There is an easy access to every information which ever exist (only press a button). Is it a real wisdom? My answer is not. Intelligence is not gathering a big number of informations, it is understanding the relations between them.

In our civilisation we are observing the invasion of pictures. Text is replaced by picture. Individualism and thinking are exchanging with standardisation and receiving impulses. The myth of being effective and rush for time make the computer a indispensable part of our reality. The
computer is a tool, which is changing and modifying itself every day, and modifying the world around. As an every new tool the computer not only makes the work easier and gives better quality, but after all it creates new skills, new shapes and spaces, and new borders of human occupation of the world (in the same way it eliminates old skills, old techniques and old forms of organisation of our life). The result is a new mentality and a new perspective from which a man can look at himself. The result is also that we are loosing some ways of communication, which are expulsed by computerised media.

Tradition of our culture has a special place for a word - library. Library was a church of all sciences. In the days of multimedia libraries became a museum if not a cemetery. “Before the world was created, the word already existed...” is there still a place for a "word" among an avalanche of pictures?
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