

## When Art Meets Science

By Michal Giboda

The doubling raises suspicion regarding the two different fields of thinking such as art and science. Doubly-gifted men and women are found strange, incompatible transplants by the members of both communities, labelled often as “the best painter of all physicists” or “the best physicists of all painters” - these euphemisms describe someone who is familiar with neither art nor science. Regardless of the fact that literature is also an artistic discipline, it is noteworthy that writers usually accept this type of such endowed persons. Visual artists are particularly jealous of their exceptionality. They are unable to admit that the ability to express something through “non-conceptual language”, (as corresponds to the definition of art by Rudolf Fila), could be cultivated outside the sphere of art school. Fila holds the opinion that the antagonism between the artistic and scientific types of thinking is cardinal. He evidences his thesis by an example of the role of intuition thanks to which a scientific discovery could be similar to an experience of art. It is the role of the subconscious that makes the difference: while the subconscious turns undesirable in the case of science, it embodies the materialized irrationality in the case of art. This understanding of the difference between art and science results often in the artist’s self-importance, a “self-identification with a creator, endowed with a great exceptionality and uniqueness”. This is the cause of the empty vessel of the bohemian that is found so disgusting by the sober scientist.

Let us focus on explaining why the multi-professional capacities of gifted persons are generally accepted by writers, but not by the community of visual artists. What is crucial is how pupils and students are trained in writing, visual arts and the interpretation of symbols in arts. How many essays must be written by a student prior to being able to pass a school-leaving exam? And how many times is he/she asked to depict his/her feelings evoked by music, or visualize the root as either a biological structure, or as an anchor in the tradition of nation or kinship, or as a pump absorbing the nutrients from the soil and mediating it into a tree or even into a society. Ask your children and children of your colleagues. The result of your inquiry is either expressed by a one-digit number, or nothing at all. Therefore it is not surprising that a gifted individual, who is trained at an art school to express their emotions, feelings, experiences and facts in the forms of shapes, colours and structures, finds themselves exceptional. Talented children, who are not trained, will never fully discover their abilities. It is only the left hemisphere of brain is being trained, so that only one type of the student’s talents can develop properly. It is like someone who is training his/her left leg only, causing the right leg to become stunted and finally results in lameness and paralysis.

On the premise that scientists’ prognosis is right, the gradual convergence of art and science will result in the asking of non-traditional questions which will naturally bring about non-traditional answers and the discovery of new horizons. This type of relationship between art and science, resulting in creativity, has its importance also in the field of natural sciences as a phenomenon that emerges in periodical cycles in mediating incidentally the information about moral values. The sooner man enters this temple the better. Preparing the future starts with education that, though is an essential commodity, is unfortunately underfinanced. It is necessary to start doing something with it right now. It concerns also non-official structures, particularly the civic society, represented by non-governmental organizations.

One of them is the České Budějovice based Civic Action Group “*Dialogue between Science and Art*” that has been organizing workshops in Hluboká nad Vltavou for two years. For a period of ten days art and science are intertwined here. Leading scholars on lecture on biological structures and their related functions, as well as on the enhanced vision that computers have afforded, the phenomenon of robotics within the context of Western society,

the aesthetics of natural structures, and the poetry of scientific information. The consequent transformation of new pieces of knowledge into a visual form at the artist's studio fosters the creative imagination of students. Participating artists showed diverse approaches to the theme stimulating the students to art making. Tomáš Proll demonstrated the technique of dripping oil colours on (glass) water surface. Then the picture was accomplished through transmitting the dripped figures on paper. The pictures evoked anatomical forms, completed by students according to individual imaginative powers. Josef Bavor used the technique of dripping lithographic colours on rubber. The dripped structures were printed on paper and completed by the participant's brushworks or enlarged, corresponding to scientists' work with microscope. Bavor collaborated with Martina Mináriková who, together with Linda Čihařová, a student from the Academy of Art, Architecture and Design in Prague, introduced the participants into perceiving the poetry and inspiring powers of the sylvan world through Land Art. This experience was particularly striking for participants from Taiwan, some of whom were not familiar with Central European type of forest. Vladimír Kokolia was focused on refining the art of perception and its transforming into imaginary faces visualized in a form of drawing. The visor perforated in the paper face reduced the viewing angle to a sector, so that the rest was to be accomplished by imagination, fantasy and vision. Geneticist Vladimír Vondřejš constructed tensegrits with the students, the principle of which is applied in modern architecture, for example for erecting a dome. The cellular skeleton has also the tensegrit structure; naturally in this case there are microtubules, rods in lieu mechanical rods. The last day of the course the participants from Taiwan presented their original culture: masks, calligraphy, Chinese noodles (which they had taken with), songs and dances.

The transmission of facts into structures and colours foster the emotive link with abstract facts, which are generally found more firmly rooted than mere verbal information. There is something extra – creation, crossing the Rubicon, the penetration into other spheres of thinking, imagination and understanding the visible, and the fulfilment of one's emotive and intellectual ambitions through accomplishing an artwork. To this effect a build-in link with facts and structures is being created, and a new paradigm – termed as creativeness - is being formed.

For more see:

<http://giboda.aoedesign.de/Cdpresent/index.html>

