

[1] Denisa

Visual perception and psychomotoric tempo as personality characteristics

The study compares the abilities of visual perception and the judgment of children when they start attending school. The children are aged between five and seven years, from different cultural environments and different ethnic backgrounds.

A computerized method, called the "Perception Test" was developed for this research study. This involved the children being shown and asked to comment on two geometrical objects. Some pairs of objects were identical, others differed in shape, color or number. The children had to decide whether the objects are equal or different. The time that the children needed to provide an answer was then measured.

The results show us that there are no statistically significant differences in the average number of correct answers given by children from different ethnic backgrounds. However, The results did show us the differences in the average time that the children needed to respond to all the items. It may be argued that these differences are partly caused by the socially disadvantaged background of some children, that is, those who have no or limited access to a computer, and therefore a low level of ability to work with them. It was only during the test that, they started to learn how to manipulate the mouse and therefore it took these children longer to provide the answer.

The next set of results demonstrate a comparison of the psychomotoric tempo as personality characteristics of children. The speed of information processing has influence during the adaptation to the school attendance.

[2] Helena

In the following text, I will try to approximate theoretical a methodology outcomes of proposal of evaluative research focused on one important aspect implementation of projects of structural fund of EU in Czech republic, namely creating quasi trades in terms of project's realization teams. I would also like to clarify misconstrued questions, using investigation techniques that are suited to the research. I make reference to these questions directly in the introduction because it is concerned with the research proposal. I have not registered so far, that would be in available sources explicitly expressed. The focus of my research should be specialized on evaluation of purposes and used resources by generating forenamed quasi trade.

Quasi trade, the subject of this paper, is about research into engaging employees in terms of the implementation of EU projects' structural funds (implementing structure, but especially project teams), . Its focus is also directive establishment, mediate subjects, final recipients, central establishment **od** public administrative, realization teams of particular realised projects – receivers of subvention, public and profitable or unprofitable private subjects.) [this paragraph reads like a list of key terms related to your research, rather than complete and coherent sentences: conjunctions and cohesive devices are missing...]

During my decision making within a purpose of developing this questions dominated an idea to afford informations to authors of political intentions on each grades, creating and directing implementation of disposal EU structural funds in Czech republic in connection with function and possible effects of quasi trade springing up within the context of realization of projects cofinancing from structural funds. [this paragraph is very disjointed]

I suppose that outcomes efficiency from research will consist in following the elevation of the effectiveness of program management for realised projects, and for projects which are at present in a

period of their genesis (it is drawing challenges of appropriate directive establishment, which basis on will be accepted project requests or paging evaluative proces).

[3] Katarina

This paper seeks to analyze the role of the Hopi prophecy of the "Rainbow warrior" during the formation process of the Rainbow Family of the Living Light spiritual group. The research followed two plans - it examined the Hopi concept of the Rainbow warrior in its original context and studied the processes of its adoption by members of the spiritual group. The research took the form of in-depth targeted interviews with 25 group members in three locations, namely Turkey, Thailand, Ukraine where the group meetings took place in 2005, 2007 and 2009. It also studied the usage of this prophecy in the group's writings. It proves that the notion of imaginary Indian origin helps to create the group's identity and shows how it is being effectively used in the process of myth-making in the group.

[4] Ondrej

Human embryonic stem cells – signs of an adaptation as a response to long term in vitro cultivation

Ráček Ondřej¹, Sedláčková Miroslava¹, Dvořák Petr², Hampl Aleš²

¹Department of Histology and Embryology, Faculty of Medicine, Masaryk University Brno, Czech Republic

²Department of Biology, Faculty of Medicine, Masaryk University Brno, Czech Republic

Introduction: Human embryonic stem cells hESCs are derived from human blastocysts which are able to proliferate indefinitely in culture when maintained in an undifferentiated state. Recent studies indicate that the long-term cultivation of hESCs may retain their phenotype affected which is regarded as a manifestation of an adaptation to culture conditions (at preserved genomic stability). In the present study, early and late passages of 3 hESCs lines were compared morphologically at submicroscopic levels to assess possible alterations in the biological properties of the cell culture after long-term cultivation.

Materials and Methods: The hESCs (lines CCTL10, CCTL12 and CCTL14) were cultivated according to the standard protocol; mouse embryonic fibroblasts were used as feeder cells. Colonies of hESCs of early (30) and late (234 and 354) passages were processed using standard techniques for both the transmission and scanning electron microscopy on day 3 and day 5 after replantation into the culture.

Results: Generally, the submicroscopic characteristics of 3 hESCs lines were similar but not identical; in particular, the cells of CCTL12 line tended to [missing word] a single cilia formation and more extensive cell-to-cell communication via gap junctions - contrary to other lines.

In all 3 lines, the growth of colonies was accelerated in late passages. A high proportion of cells in colonies expressed undifferentiated state markers, however electron microscopy reveals a relatively high rate of partially differentiated cells (on day 5 in early passages, and on day 3 in late passages). Scanning electron microscope revealed numerous microvilli extendings; this could be established from the surface of some cells, their length and the increase in number from the time of replantation, and with high number passage. The Rate of microvilli formation also differed among cell lines. Other types of surface modifications (blebs, filopodia, shedding vesicles) were observed. The differentiation potential of hESCs was not reduced up to 234 passage, but it decreased slightly at 354 passage.

Conclusions: Acceleration of the cell cycle in late passages of all 3 lines, early morphologic marks of spontaneous differentiation and extensive microvilli formation may be considered to be signs of an adaptation to culture conditions. Analysis of submicroscopic structure of hESCs colonies showed certain differences in cell phenotype among individual lines.

Supported by Research Project MSM0021622430 of the Ministry of Education, Youth and Sports of the Czech Republic.

[5] Martin

Russia has been one of the main suppliers of energy resources to EU member states. This fact, together with their energy interdependence, have many connotations in the economic and political spheres. This is because on both sides we can observe some signs of distrust, stemming from the fusion of business and politics in Russia, and Russian fear of asymmetric interdependence on the European Union. The main Russian energy player in Europe is Gazprom, which has worked out its strategy on how to survive and expand in European markets, though this is not always compatible with EU politics and the energy liberalization policy.

[6] Petra

"This paper provides an overview of client concepts constructed by nongovernment organisations (NGO) which provide social services for prisoners. The particular concepts focused on are the sociological and psychological factors. and by field of social work standpoints consider. This NGO's determine aims of intervention with prisoners by using a strategy to explore their conduct. The correlation between the aims and concepts of the client is described and analysed, following which the fundamentals of implementation are introduced."

[7] Katka

Hello, here is my abstract. I would like to mention some results of my research, but there I still have not got any. I have just started my research. That abstract should be presented for my contribution in post-conference book.

Information and communication technologies (ICT) are rapidly undergoing developments on a daily basis. They influence every part of human society. Geoinformation technologies, as part of information and communication technologies, are implemented especially into the teaching of geography. This paper presents dissertation research that is focused on the use of geoinformation technologies in geography teaching and its influence on learning and the development of map skills (map reading, analyzing, interpretation and map creation). A description of the results of a current state of geoinformation technologies used in geography teaching are presented; the differences between women and men teachers and novice and expert teachers are briefly described. An experiment and case study used in a lower grade of a grammar school provided the primary data for assessing the map skills development within the use of geoinformation technologies.

[8] Jan

Aesthetic relation between literature and illustration. Definition, explication and limits of illustration.

Nowadays, as in the past, the term illustration is considered more or less intuitively. Nevertheless, it is clear that there is not relevant research of concept illustration among philosophical studies. This paper aims to address this need and to answer semantically question what the illustration is.

The basis of this research is a comparison of around twenty paradigmatic examples of relations between text and illustration which embrace a wide range of genres and expressive renderings: this includes examples from illustrations of poetry to technical literature. We interpret them via both the reading of images and reading texts. In addition to content we have to also analyze the form of examples as well in an attempt to answer the question whether the text and its image must have the same degree of aesthetic value by virtue of falsification of Gestalt of examples in our anthology. The first point of our theory is that the primary rendition of the phenomena is usually through the picture; and it is this that gives rise to the imagination.

The differences between text and illustration are considered as limits of expression, linguistic conception of text grammar and non-grammatically conception of image, using of universalies in text expression and concrete expression of phenomenon in illustration. The last chapters of work explore the pejorative use of the term illustration among art critics and other historical connotations associated with this term.

Such analysis provides us with sufficient and necessary conditions to define the concept illustration, and facilitate the explication and limits of illustration which should be useful for both art critics, artists and also anyone who is interested in this area.

[9] Jitka

History of variational calculus and its applications in physics

The variational calculus was formulated at the end of 18th and beginning of the 19th century by means of mathematical analysis. From its very beginning, it was closely connected to the development of analytical mechanics and the formulation of the principle of least action and the physical problems associated with it.

During the 20th century, a new approach to this field was developed, using differential forms and fibred manifolds. This geometric formulation of variational calculus is not only an alternative method to the “classical” formulation, but it also enables formulating and solving fundamentally new types of problems.

In this thesis, there are analyzed basic texts which led to the formulation of variational calculus on fibred manifolds and examples show the differences between the “classical” and the “new” approach. It specifically focuses on the work of Théophile Lepage, who introduced the idea of using differential forms in variational calculus; a comparison of these ideas is then made with expressions of Emmy Noether's theorem in both formulations.

[10] Vincent

In this paper I would like to concentrate my focus on one of the crucial terms of Stanley Cavell's philosophy – the ordinary and moral „perfectionism“. By research of this two terms in the context of Cavell's thinking, we would get into the most relevant extent of his conclusions about task of philosophy.

Stanley Cavell is a leading figure in American philosophy and one of the most exhilarating and wide – ranging intellectuals of our time. [\llcorner very well formulated sentence] The medium from which we will take the investigation is language in its everyday/ordinary use. Cavell is developing the resources and employing procedures of ordinary language philosophy in which their main task is to clarify the conception and function of ordinary language in general by asking „what we should say when“. This style of thinking about language – going from „college to streets“ – gets into the investigation of everyday use of language in „every“ possible situation. How I use language would provide an indication and answers of who I am in a moral status. By linking the ordinary with moral perfectionism,



I would try to show that we cannot strictly bind or measure philosophy by academic dimensions, because we must assume that philosophy is a matter of everyday practical life.

[11] INTERACTIVE EMBRYONIC ATLAS

Dumková J.

Department of Histology and Embryology, Faculty of Medicine, Masaryk University Brno

The study of embryology is an essential part of education in the theoretical branches of the Faculty of Medicine.

In our Department of Histology and Embryology, there are ample collections of embryonic material assembled in the depository. We decided to use this unique material of mouse, rat and also human embryos for new processing and utilization, and to prepare study materials for medical students, advanced students and students of closely related fields and persons concerned in the embryology.

Animal embryos have a potential to become a suitable model for the study of developmental processes resembling human embryos in the very early stages of development (first 8 weeks). The best images of evidence are inserted into the interactive programme and are accompanied by a verbal explanation. The new images have been organised into chapters according to the development of individual organ systems and the developmental stages during embryogenesis.

The atlas will contain overview representations, which enable students to awake to topographic relations between organ systems. Students will work with this material more actively, because they will assign embryonic structures and tissues in the form of a supplementary test.

An interactive embryonic atlas will be available for all users, i.e. for the students and public. The subject matter presented in this atlas will help to create a better understanding of other subjects, including some clinical specializations.

[12] By Anezka:

Relation between picture and lyric in the poem *Délie* of Maurice Scève

The studies of 16th and 17th century emblem books are currently highly actual at American and West European universities. Our research, which aims to contribute to the discussion, explores the relationship between picture and lyric in the emblem poem *Délie* of Lyon, by Maurice Scève (1500-1564). We compare the fifty hermetical engravings, mottos and poems of *Délie*'s first edition (1544) to relevant period emblem books. These are then interpreted and a uniting system is then searched for. This system, which is based on the classification of different lyric motifs, finally serves to define the novoplatonic idea included in the poem. The research travels along a linear series of pictures and proceeds from the text to the picture with parallel correction in the reverse direction. The first part presents the biographical context and a period role of the emblem book. The second part clarifies the symbolic language through style comparison, figure interpretation and most importantly, structure experimentation. Such analysis provides a new method on how to understand an emblem work, finding significance in the structure of the work and its

Tento projekt je spolufinancován Evropským sociálním fondem a státním rozpočtem České republiky.



intrinsic systems. At the beginning of the third millennium, a search for new interpretative method for a topical scientific problems is underway.