

ABSTRACTS:

1) Jarmila Bradova:

This paper presents results of research conducted to verify the existence of an action zone of teacher's and pupils' interaction in an elementary school classroom. 32 sixth grade classrooms of sixth were observed, in which teacher-pupil interaction was noted into a standardised recording sheet and consequently processed using quantitative analysis. The results of the research argue that the existence of action communication zone in a classroom is not axiomatic and it depends on various factors such as taught subject, teacher's movement in a classroom and the fact who creates a seating chart.

2) Michal Cigan:

Indra, Beowulf and the monster's mother in the water cave: The problem of genetic-based textual resemblance of archaic Indo-European narratives

This paper deals with theoretical and methodological issues in the field of comparative Indo-European mythology. These are demonstrated through the case of practical textual comparison of Indrasúkta RV 1.32 and the Epic of Beowulf. Mutual affinities of compared structures are rooted in affinities of their social backgrounds, which in general, are genetically unrelated. However, Indo-European interpretation of both narratives remains methodologically sustainable. The author suggests reflection of different semantic layers of analyzed text in dependence on different types of its contextual processes. Hypothetical genetic relations of the compared texts have to be evaluated in each of the layers separately.

3) Vladimir Dordevic:

“What binds the Western Balkans to the Caucasus is, among other issues, certainly an extremely challenging legacy of the past. The dissolution of two respective multinational states, the Soviet Union and Socialist Yugoslavia in the beginning of the 1990s, introduced ethno-nationalist conflicts on large scale. While the Yugoslav crisis ended in 1999 after FRY was bombed by NATO during its Kosovo campaign, the Caucasus still remains a conflict-ridden region where Russian and Western influences keep colliding. In that respect, the point of this article is to present an analytical comparison of the three respective regional conflicts, Kosovo, Abkhazia and South Ossetia, by enumerating and analyzing similarities and differences between the three states. This proves to be one of the current and more intriguing issues on the contemporary international political scene. In that respect, the article aims to provide answers to two different questions: did Kosovo’s independence influence the establishment of a specific political pattern applicable to other disputed regions, and on the other hand, to what degree are the cases in question comparable to each other”?

4) Lucie Grodecka

Title: Functional analysis of four SERPING1 promoter mutations

SERPING1 is a gene coding for C1 inhibitor, principal regulator of the complement activation. Many mutations of the gene have been detected so far, resulting in development of hereditary angioedema. Four of the mutations were found in SERPING1 promoter sequence, but their role in the promoter function was not demonstrated. In order to better understand the impact of those promoter mutations on the C1 inhibitor expression, we employed luciferase reporter gene assays. We examined various promoter variants in two distinct SERPING1 sequence stretches and two distinct cell lines, U-937 and HepG2. We found that mutation -40 C>G significantly decreased promoter efficiency in one of the examined promoter stretches, while it was silent in the other one. Mutation -45 C>A did not exert any influence on the reporter gene transcription. The other two mutations, -101 A>G and -103 C>T significantly but inconsistently increased the promoter activity, which does not correspond to the decrease of C1 inhibitor plasma concentration found in patients. Further, we did not confirm a negative correlation between SERPING1 mRNA level and the C1 inhibitor plasma concentration proposed by other researchers. Therefore we conclude that the surveyed promoter mutations may affect SERPING1 promoter activity. However, their role in regulation of C1 inhibitor expression is rather complex and deserves further examination.

5) Adam Janek:

Title: The Rosy Road to Russian

Abstract:

In the present paper we showed how a modern language textbook should be designed for the effective teaching of the Russian language. We defined all criterias we found to be most substantial for each language textbook – not only for the Russian language textbook.

The criterias are founded on a research project lasting more than one year, among the target group of 16-22 year old students. On the basis of the displayed criteria we created a concept of a modern textbook for present-day Russian which guarantees a high level of efficacy during lessons. Models of how to use and work with the whole textbook, as well as with single exercises are demonstrated in this paper. The main ideas, solutions and decisions related to the process of creation of the new textbook are also offered here.

6) Petr Pakosta

Title: Popular beliefs about the reasons for poverty in the Czech Republic from 1991 to 2008.

Previous research revealed that the Czech Republic, as a post-communist country, in the last twenty years has experienced rapid changes in social structure, accompanied by growth in social inequalities. We consider popular beliefs about poverty and reasons “why people are poor” as an important cultural factor of social policy. However, we found a lack of literature focused on public beliefs about reasons of poverty. Therefore we analyzed datasets from the European Value Study (conducted in 1991, 1999, and 2008).

We found that blaming the poor (from laziness and lack of will) is a dominant explanation of poverty, which displays the highest rate among all European countries. Individual destiny, macrostructure and societal causes are cited much less. Moreover this complex range of opinions was stable from 1991 to 2008. Blaming the poor is connected with party affiliation (left or right wing) and it is not connected with any demographic characteristics of our respondents. We suggest that one possible explanation lies in the small proportion of the poor in the Czech Republic (in comparison with other European countries), which changes perception of the poor. Due to small proportion of the undeserving poor is a main body of the poor regarded as the deserving poor whose are easy to blame from their own status.

7) David Sehnal

Title:

SiteBinder: A GUI Based Software for Superimposing Large Sets of Small Protein Motifs and Calculating their Structural Models

Abstract:

SiteBinder is a computational tool with an intuitive graphical interface for comparison of 3D structural motifs in proteins. It employs a-priori knowledge of amino acid side chains to find optimal pairing of atoms. Subsequently, quaternion algebra is applied to minimize root mean square deviation (RMSD). It is optimized for large sets of smaller to medium size domains or motifs and outperforms state-of-the-art programs like VMD, PyMOL, or Chimera in such applications. We demonstrate its applicability by a superimposition of 503 zinc finger motifs, a comparison of 66 sugar binding sites from PA-IIL lectin complexed with different sugars, and an analysis of a BH3 domain in apoptosis proteins.