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Geographical analysis of elections in Visegrad group countries in 2010

In every country of Visegrad group took part elections this year. The purpose of this text is to address the questions surrounding the source of electoral support for the conservative, liberal and social democratic parties, and to establish the determinants of this support for selected parties before highlighting the differences for selected countries.

The answer to the first question will be found by drawing maps of electoral support. The second question will be answered with usage regression analysis with electoral results in regions as dependent variables, and data about cleavages in society as independent variables.

The spatial distribution of similar parties is **different** in **different** countries. There are also several **differences** in the nature of party systems in selected countries. The Czech party system is largely based on cleavage owners employers while Slovak and Polish parties tend to be based on urban-rural cleavage. In the case of Poland, rural areas are defined by agriculture, while in case of Slovakia by population in cities. Electoral support of Hungarian parties is almost independent on used variables.

[Overall: minimise repetition, and pay attention to ensuring clarity in meaning and expression]

Zuzana:

Named entity recognition (NER) is important for different NLP tasks. During a linguistic analysis of syntactic to semantic forms, it is useful to know about a word or word expression that it represents an named entity (NE) such as person, institution or place. Within this task, several problems appear. First, languages with rich nominal inflection (e.g. Slavonic languages) inflect proper names, therefore, morphological analyzers are an important part of the analyses. While these programs usually contain the stems of most words, it is difficult to add to and maintain a database of proper names.

Second, during an analysis it is sometimes more efficient to replace the entity (e.g. John Smith) by its category (a person). For this reason it is necessary to have a classification of NEs. Finally, when high ambiguity within NEs appears, this is typically, among other things, due to the occurrence of more than one John Smith.

This paper considers all the aforementioned inter-related issues. All three aims are partially achieved by hyperlink extraction in Czech Wikipedia.

[Overall, a well-formulated abstract in which you show good command of sentence structure. Please see the comments above, too].

Michal:

Semantics of proper names in fiction

Keywords: semantics, fiction, proper names, fictional proper names, empty names, rigid designation, direct reference, millianism, fictional worlds, counterparts, Kripke, Doležel

In recent 40 years, both philosophers and literary theorists have struggled to reveal the semantic nature of proper names in fiction. Most philosophers have treated fictional names as a subcategory of so-called empty names, emphasizing their unsuitability of being directly referring terms due to the absence of empirical referents. Literary theorists, on the other hand, have often declared unique nature of fiction while creating fictional semantics and ignoring philosophical objections. This article deals with the semantics of all types of proper names which one can find in literary works of fiction, analyzing and comparing both philosophical and literary theoretical tradition. Kripke's theory of direct reference of proper

names is introduced and various ways of how this may help to overcome the problem of empty names is discussed. The direct reference theory proves to be the most important inspirational source for a large group of literary theorists. The theory of counterparts by Lubomír Doležel, an influential proponent of the fictional worlds theory, is also discussed, discovering the influence of Kripke's term of rigid designation. However, Doležel's solution, being a part of the complex fictional semantics, proves Kripke's theory of rigid designation can rarely be used when treating fictional names. Thus, a competing solution based on a non-Kripkean explanation of the fictional proper names is presented.

Overall: you express yourself fairly well; at some stages I feel the reference to theorists could be clearer]

Jana:

The European Commission Register of Interest Representatives: Expectation and Reality

Keywords: CONECCS, European Transparency Initiative (ETI), European Commission, interest groups, lobbyists, lobbying, Register of Interest Representatives, transparency in decision-making and policy-making.

The opening of the Register of Interest Representatives (the Register) in June 2008 is one of the most important developments in the domain of lobbying regulation at the EU institutions and enhancement of transparency in interest representation. This article seeks to identify the functional and systemic shortcomings of the Register and contrasts them with the Commission's evaluation of the Register's function. Special attention is accorded to the analysis of financial data published by interest groups in the Register. The original empirical research in which quantifiable data from 1063 registered interests were evaluated is also examined. The analysis of the financial data is complemented by a survey administered to the registered interest groups. The questionnaire was addressed to almost one third (324) of interests registered at the end of February 2009; the return rate achieved was 22,84%. The survey provides evidence that interest groups do not follow common methodology while calculating the amounts invested into lobbying. The research suggests that insufficient methodology for calculating financial amounts coupled with a passive control system of truthfulness and completeness of the registered data, with weak motivation to voluntarily register as well as, in fact, a non-existent sanction policy, this all decrease credibility of the data in the Register. Consequently, the level of transparency of the financial aspects of lobbying is to a great extent limited. [With the exception of the excessively long sentence above, this is a well formulated abstract. Don't forget to use paragraphing...]

Helena:

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Transcatheter Closure of Coronary Fistula by Implanting Three Platinum Coils in a 91-year-old Female.

Background:

Coronary artery fistulae are defined as abnormal communications between a coronary artery and a heart chamber or a big vessel.

Incidents in diagnostic coronary angiography among adults varies between 0,1 -0,2%.

Case report:

A 91-year-old patient was referred [this would usually be followed by the person/organisation to which the referral took place] for elective coronary angiography due to typical exertional long-term chest pain and shortness of breath, worsening in last month, resulting in a NYHA class III.

A catheter examination showed a fistula connecting proximal segment of the left anterior descending artery and proximal portion of pulmonary artery.

The decision for percutaneous occlusion of the fistula was taken. The procedure was completed without any complications. After a hospital discharge, the patient was asymptomatic and in a good condition for 10 months after the procedure.

Conclusion:

Coronary artery fistula can be safely treated by percutaneous transcatheter closure even in elderly patients.

[Good]

Michaela:

Emerging commitments in middle adolescence: content analysis and possible antecedents

The exploration and formation of commitment are generally seen to be key concepts in the study of identity formation. The explicit expression of commitment is usually evident during the middle and late stages of adolescence when they emerge in the different domains of life. They represent a long-term process determined by previous personal experiences and influenced by many contextual factors (Bosma, 1992; Kunnen, 2009).

The aim of this contribution is to characterize the content of commitments in the 17-year-old respondents in this study and to describe psychosocial factors (the influence of parents, peers, self-evaluation), which can be regarded as their antecedents in early adolescence. The sample includes adolescents who participated in the long-term longitudinal research ELSPAC since their prenatal stage of development (n = 503 at the age of 17).

As an instrument for investigating commitments, we used the Czech adaptation of the Groningen Identity Development Scale (GIDS; Bosma, 1985). It combines an interview and a questionnaire to analyze the content and strength of commitment and the amount of exploration in the different domains of life (school, occupation, leisure-time activities, philosophy of life, friendship and romantic relationships). As possible predictors, we used variables regarding the perception and evaluation of parents, peers, and of themselves. [very clear paragraph]

Preliminary results based on qualitative and quantitative data analysis inform us about the subjective importance of commitment, specifically in relation to strength, indications of agency, and the degree of exploration. Former parental influence (in terms of perceived parental styles in the age of 11, 13 and 15) seems to be a weak predictor of emerging commitments. There is evidence of a relationship between styles of self-definition and the degree of exploration, as well as a link between the development of global self-evaluation (in terms of the clarity of self at the age of 15, and self-esteem at the ages of 13 and 17) and the strength of commitments.

Radovan:

The application of transcranial color-coded sonography in severe brain injury

Abstract

Introduction

Brain ischemia is one of the most important components of secondary brain injury. The fundamental function of brain ischemia is to lower the cerebral blood flow (CBF) to below critical level. Among the factors contributing to CBF decline are intracranial hypertension, hypotension, microvascular damage and compression by hematomas etc. Current therapeutic strategy is based on the control of intracranial pressure and maintenance of adequate cerebral perfusion pressure. In cases of severe brain injury, disturbances of autoregulation may occur and a CPP-oriented therapy may worsen intracranial hypertension due to increased cerebral blood volume. On the other hand in patients with posttraumatic vasospasms, CPP levels are higher than in the presence of hyperaemia. Knowledge of patient's hemodynamic status – hyperaemia or vasospasm – helps to choose proper therapeutic strategy. A linear correlation between blood flow velocity and cerebral blood flow

(CBF) makes possible to determine CBF levels by use of transcranial color-coded sonography (TCCS). Calculation of Lindegaard's index distinguishes brain hyperaemia from vasospasm.

Aim of the study

To detect hemodynamic changes in trauma brain injury patients using transcranial color-coded duplex sonography (TCCS) and comparison with intracranial pressure in severe brain injury patients.

Method

A TCCS equipped with an ultrasound probe 2,4MHz was used to measure blood flow velocity in ACM bilaterally through a transtemporal bone window. Peak systolic velocity (PSV), end-diastolic velocity (DV) and time-average mean velocity were captured and pulsatile index, resistance index a LI were calculated. ICA flow velocities were recorded in the cervical region; the Lindegaard's index was also calculated. The TCCS examination was performed once daily over a period of 7 days. At the time of the investigation, patients were hemodynamically stable and received full conservative treatment. ICP and CPP values were recorded as well. According to the FV values, the presence of cerebral hyperaemia or vasospasm was established.

20 patients were examined in the study. The inclusion criteria was that the patients must have severe brain injury (GCS <8) and admittance for 24 hours after injury.

Results

80% of patients showed significant hemodynamic changes within a week after severe brain trauma. Hyperaemia couples with intracranial hypertension was detected in 41,6 % of patients. The presence of vasospasms was noted in 23% of patients within an average time of duration 2,8 days. Vasospasms also occurred in cases where subarachnoid haemorrhage absented.

Conclusion

TCCS detection of hemodynamic changes in severally brain injured patients may help to disclose subgroups of patients requiring different therapeutic strategy. This may then contribute to the reduction of secondary ischemic cerebral damage.

Eva:

ATP content in the chemolithoautotrophic bacteria *Acidithiobacillus ferrooxidans*: application of luciferase reaction kit

Acidithiobacillus ferrooxidans is an acidophilic chemolithoautotrophic bacterium that can grow in the presence of either ferrous iron, or reduced sulfur compounds. A chemiluminescence system was used to investigate energy levels in *A. ferrooxidans* grown on various substrates. Implementation of a commercial kit based on firefly luciferase which obtains exact ATP content values in acidophilic *A. ferrooxidans* is demonstrated in the present work. Many analytical perspectives had to be taken into consideration due to both low pH of the bacterial cultures, and the substrates inhibition of luciferase. The relationship between active and substrate-limiting phases and cellular ATP content was confirmed. In the case of soluble substrates, cellular ATP content exceeded the value of ATP content in cells growing on elemental sulfur; this supports elemental sulfur limitation postulated earlier. This study is the first of its kind to exact ATP content values in acidophilic bacteria.

Katerina N.

This work analyses a category of self, in American author's R.W. Emerson, W. James and J. Dewey's philosophy. We focus on Emerson's concept of self-reliance, the critique of egoism and the ontological aspects of soul; W. James's psychological analysis of the self structure, his concept of subconsciousness and stream of thoughts and finally J. Dewey's ethical point

of view in the field of concept of the self. We compare these authors using four categories derived from an analysis of their work. We tried to show and emphasize the substantial connection of philosophical and psychological points, what was common in temporary works for this period of time. That strengthens the claim that more influences of philosophy in the psychological science are needed. My recommendations are that higher interest of philosophy is implemented into the science of psychology because of the close connections between these two fields.

Katerina D.

Oligogalacturonide – induced defence responses in grapevine cell cultures

The stimulation of plant defence reactions is an alternative to pesticide use in plant protection against pathogens. The defence responses are induced by elicitors derived from pathogens or plant cells during infection. Alpha-1,4 oligogalacturonides (OGA) are released from plant cell walls by pathogen enzymes. The effect of OGA on defence reactions in grapevines (*Vitis vinifera* L.) cells was studied. OGA treatment induced alkalization of extracellular medium, enhanced the expression of genes encoding phenylalanine ammonia lyase, stilbene synthase, chitinase and thaumatin-like protein, increase in stilbene production and salicylic acid accumulation. OGA did not influence the viability of grapevine cells. These effects should be now checked in whole plants. [this is clearly written, although greater flow/cohesion could be achieved through the use of connectors/cohesive devices between sentences].

Johana:

Abstract

The clock gene *Period3* (*Per3*) has recently demonstrated to affect circadian expression of various genes in a variety of tissues, including those in the heart. Alterations in the circadian patterns of a variety of circulatory functions are frequently observed in cardiovascular diseases. No studies of *Per3* gene on chronic heart failure (CHF) patients have been conducted so far, therefore we investigated the effect of variable number tandem repeat (VNTR) polymorphism *Per3* on CHF. The study subjects (371 patients of Caucasian origin with CHF and 332 healthy controls) were genotyped for *Per3* VNTR polymorphism using an allele-specific PCR. No significant differences in genotype or *Per3* VNTR allele frequencies were observed when comparing CHF cases and control ($p_g = 0.30$, $p_a = 0.52$); moreover, no significant differences were observed when comparing CHF cases according to their etiology ($p_g = 0.87$, $p_a = 0.91$). In the multivariate regression modeling, no predictive function of VNTR *Per3* polymorphism on ejection fraction or NYHA class, hyperlipidaemia or type II diabetes risk was observed. [the sentences before this insertion are grammatically accurate – and well-formulated: however, take care not to repeat the structure, i.e. ‘no...was observed’] Based on the results of this/our study, we do not consider the *Per3* VNTR polymorphism to be a major risk factor for chronic heart failure or a factor modulating severity of the CHF in the investigated Caucasian population.