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UP SKILLS

i.	**Name of the course** Secondary imperfectivisation in Bosnian/Croatian/Serbian (BCS)
ii.	**Level of the course** MA, PhD
iii.	**Workload** 5 ECTS
iv.	**Institution** University of Graz
v.	**Course instructor(s)** Boban Arsenijevic, Marko Simonovic

vi. Brief course description

The course provides a state-of-the-art overview of the literature and ongoing research of one of the most hotly debated issues in Slavic linguistics. The course enhances the problem-solving and data-analysis skills, thus preparing the students for a wide range of possible careers. It also provides the students with first-hand scientific research experience.

A collection of state-of-the-art articles on the topic are read and discussed in each class. This discussion amounts to approximately 50% of the class.

For the second half of the class, the students are asked to focus on one of the claims made in the article read for the respective class (if the article is not about BCS, the students verify whether the claim about the other Slavic language applies to BCS) and present the results of their small-size empirical research testing this claim. To this end, the students are given access to the database of the project *Hyperspacing the verb*, where 5000+ verbs are annotated for various phonological, morphological, syntactic and semantic features. The students are also asked to take the ReLDI course *Introduction to Corpus-Based Methods in Linguistics.*

In all but two last classes all students present the results of their small-size empirical research and their presentations get discussed. In the two last classes, the students hold their final presentations in which they present the research on which they chose to submit their final report.

At the end of the course, the students submit their final report using the template created by Tanja Samardžić, Maja Miličević Petrović and Genoveva Puskas within the course “Introduction to research in linguistics: theory, logic, method”

(https://phil.openedx.uzh.ch/courses/course-v1:PHIL+Movetia101+2046/info), which was eventually which was eventually adapted into the UPSKILLS research report template.
vii. Research related subject Morphology and semantics of the secondary imperfectivization of the Slavic type.
viii. Data the students work with BCMS corpora hrWac, srWac, bsWac, the databases of the project Hyperspacing the verb.
ix. Overview of topics

A: Research design
A1: General research design
[Teaching materials] UPSKILLS Moodle course First steps into scientific research https://upskillsproject.eu/project/scientific_research/ Movetia/ReLDI courses: https://phil.openedx.uzh.ch/courses/course-v1:PHIL+Movetia101+2046/info (in English) https://phil.openedx.uzh.ch/courses/course-v1:PHIL+ReLDI101+2018/info (in BCMS)
A2: Adapting the general research design to the specific topic of interest
Identifying the patterns of secondary imperfectivization and both their predictors (thematic vowel, prosodic pattern, final segment, aspectual properties of the base, other possible factors) and the predictors of the very possibility of secondary imperfectivization of a verb (aspectual class, other possible factors)
A2.1: Formulation of questions and hypothesis in terms of variables
A2.2: Formulation of predictions of H0 and H1
A2.3: Selection of optimal research techniques, selection and creation of corresponding data sources • Experimental paradigms (e.g., elicitation, judgements, forced-choice, self-paced reading) • Developing and exploiting databases and corpora (e.g. manual data annotation)

A2.4: Identifying the optimal data analysis method
A2.5: Inferring theoretical consequences from the specific data analysis results
A3: Adapting the research design to the available research infrastructures
Familiarising with the type of data extractable from the available corpora; Familiarising with the type of data extractable from online surveys; Choosing the optimal way of annotating the properties
A3.1 Selection of optimal research techniques, selection and creation of corresponding data sources (see also A2.3) • data compilation, data analysis; • understanding, selecting and performing optimal statistical tests and models, • identifying the optimal data analysis method
A4: Research reporting
Developing and formulating formalizations of the relevant semantic regularities in terms of the lambda calculus. Selecting the optimal formal morphological framework and using it to present the observed morphological regularities
A4.1 Presentation modes for research reporting (short oral presentation, report)
A4.2 Established procedures and conventions in research reporting, such as: • the ordering of thematic units in an article/squib/report, • organization of the presentation, • amount of text and graphical items on a slide/handout, • terminology, • citing conventions
B: Infrastructures & techniques
B1: For obtaining literature
[GENERAL-PURPOSE REPOSITORY] Research Gate, Google Scholar, Academia.edu, [DISCIPLINARY REPOSITORY] lingbuzz, semantic scholar
B2: For obtaining, sharing and managing data
Advanced use of the available corpora for the target language, advance use of online surveys (use of CQLs, use of additional options)

B2.1: Definition of research infrastructures, and the main concepts around **data interoperability**, such as **data**, **metadata** and **standards**
B2.2: Platforms and repositories
B2.3:Identifying, collecting, creating and/or using relevant data for research projects • Searching, identifying and selecting relevant corpora from language resources platforms and repositories hosting them • Citing linguistic data sets as appropriate. • Familiarity with online survey tools
B3: For analysing data
B3.1: Softwares for statistical analysis (R)
B3.2: Corpus management and text analysis software (NoSketch Engine, AntConc)
C: Subject-specific topics
C1: What is verbal aspect?
C2: How does the verbal aspect relate to verbal morphology in Slavic and beyond?
C3: Why and when is there optionality?
C4: What are characteristic properties of Slavic verbal morphology?
C5: Basic concepts of Formal Semantics

x. Learning outcomes

A: Research design
A1: Students will be able to make an overview of the general research design.
[Teaching materials] UPSKILLS Moodle course First steps into scientific research https://upskillsproject.eu/project/scientific_research/ Movetia/ReLDI courses: https://phil.openedx.uzh.ch/courses/course-v1:PHIL+Movetia101+2046/info (in English) https://phil.openedx.uzh.ch/courses/course-v1:PHIL+ReLDI101+2018/info (in BCMS)

A2: Students will be able to create a suitable research design for the specific topic of interest.
Students will be able to identify the patterns of secondary imperfectivization, their predictors and the predictors of the possibility of secondary imperfectivization of a verb (aspectual class, other possible factors).
A2.1: Students will be able to formulate questions and hypotheses in terms of variables.
A2.2: Students will be able to formulate H0 and H1.
A2.3: Students will be able to select optimal research techniques, and create corresponding data sources. • Experimental paradigms (e.g., elicitation, judgements, forced-choice, self-paced reading) • Developing and exploiting databases and corpora (e.g. manual data annotation).
A2.4: Students will be able to select and implement the optimal data analysis method.
A2.5: Students will be able to infer theoretical consequences from the specific data analysis results.
A3: Students will be able to adapt a research design to the available research infrastructures.
Students will be familiar with the type of data extractable from the available corpora; Students will be familiar with the type of data extractable from online surveys; Students will be able to choose the optimal way to annotate the relevant semantic and morphological properties.
A3.1 Students will be able to select of optimal research techniques, select and create corresponding data sources (see also A2.3) • data compilation, data analysis; • understanding, selecting and performing optimal statistical tests and models.
A4: Students will be able to report on their performed research in accordance with standards and conventions in the field.
Students will be able to represent the relevant semantic regularities in terms of the lambda calculus. Students will be able to select the optimal formal morphological framework for their data and use it to represent the observed morphological regularities.

A4.1 Students will be able to select and implement different presentation modes for research reporting (short oral presentation, report, article etc.).
A4.2 Students will be able to implement established procedures and conventions in research reporting, such as: • the ordering of thematic units in an article/report, • organization of the presentation, • amount of text and graphical items on a slide/handout, • terminology, • citing conventions.
B: Infrastructures & techniques
B1: Students will be able to identify and apply suitable infrastructures & techniques for obtaining literature.
[GENERAL-PURPOSE REPOSITORY] ResearchGate, Googlescholar, Academia.edu, [DISCIPLINARY REPOSITORY] lingbuzz, semanticscholar.
B2: Students will be able to identify and apply suitable infrastructures & techniques for obtaining, sharing and managing data.
Students will be able to extract data from the available corpora for the target language, Students will be able to obtain data in online surveys.
B2.1: Students will understand what research infrastructures are, and the main concepts around **data interoperability**, such as **data**, **metadata** and **standards**.
B2.2: Students will be able to identify suitable platforms and repositories.
B2.3: Students will be able to identify, collect, create and/or use relevant data for their research projects • Searching, identifying and selecting relevant corpora from language resources platforms and repositories hosting them • Citing linguistic data sets as appropriate. • Familiarity with online survey tools.
B3: Students will be able to identify and apply suitable infrastructures & techniques for analysing data.
B3.1: Students will be able to select and use softwares for statistical tests.
B3.4: Students will be able to select and use concordancers for the analysis of corpora.

C: Subject-specific learning outcomes
C1: Students will be able to discuss the core issues of verbal aspect.
C2: Students will be able to discuss the relation between verbal aspect and verbal morphology in Slavic.
C3: Students will be able to identify the potential loci of optionality regarding the pattern of secondary imperfectivization in Slavic.
C4: Students will be able to apply morphological and semantic models onto linguistic data.
C5: Students will be able to represent semantic insights in terms of lambda calculus formulae and to interpret such representations.

xi. Overview of evaluation	
Rubric	Weighing
Participation in classes (initiative, forward thinking, problem solving, critical thinking, organisation, time management)	20%
Homework (data collecting, annotation, analysis)	20%
Outputs based on the final research report ○ oral presentation ○ final written report	60%

xii. Career paths

a. Academia
b. Natural language processing
c. Market analysis

and all careers involving data analysis

xiii. Reading materials

Arsenijević, B. (2013). The for-phrase. Philologia Mediana, 515–538.

Łazorczyk, A. A. (2010). Decomposing Slavic Aspect: the Role of Aspectual Morphology in Polish and Other Slavic Languages [University of Southern California]: Chapter 4: Secondary imperfectives, pp. 104-161.

Markman, V. G. (2008). On Slavic semelfactives and secondary imperfectives: Implications for the split 'AspP.' Proceedings of the 31st Annual Penn Linguistics, Article 20.

Polančec, J. (2018). Osamostaljeni izvedeni nesvršeni glagoli u hrvatskom jeziku. Suvremena Lingvistika, 85, 113–138.

Simonović, Marko and Petra Mišmaš. 2020. √ov is in the air: The extreme multifunctionality of the Slovenian affix ov. Linguistica 60.1. DOI: 10.4312/linguistica.60.1.83-102.

Tatevosov, S. (2015). Severing imperfectivity from the verb. In G. Zybatow, P. Biskup, M. Guhl, C. Hurtig, O. Mueller-Reichau, & M. Yastrebova (Eds.), Slavic Grammar from a Formal Perspective (pp. 465–494). Peter Lang.

Tatevosov, S. (2018). On the aspectual architecture of Russian. Ms. Mosscow: esp. Sect. 3: Imperfectivity and "imperfective" morphology.