

Annotation
to the set of publications
"Interdisciplinarity and innovation in Arabic and Islamic studies"

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The current stage of development of science requires not only new thinking and new solutions to fundamental problems, but also use of qualitatively different approaches and research methodologies, which can be done beyond the limitations imposed by individual scholar disciplines on the basis of both classical and innovative, first of all digital, research tools technologies. In this case, interdisciplinarity allows relying on a more complete picture of the phenomenon or object under examination and a much larger than before volume of initial data, to carry out adequate processing and analysis, and hence to obtain results relevant not only for solving particular, but also fundamental scientific problems.

The mentioned above is fully true in respect to classical oriental studies, which is based on the analysis of original text, the study of form and content of original sources, verification of their authenticity, and dating of their creation, their place and role in the cultural and historical continuum of the civilization process.

Interdisciplinary approach and the use of digital technologies are relevant for both classical and modern arabographic texts, since it allows critical analysis and authentication of original sources and documents often used as arguments in modern Islamic discourse, which is important for current decision making

Describing the theme and the content of the cycle of works submitted to the contest in general, it should be noted that they address in particular such problems as automated recognition of arabographic texts and their formalization, problems of machine translation from Arabic, computer content analysis of the Arabic texts, Arabic dialectology in the context ICT development, language of social media, text sentiment analysis. Considerable attention is paid to the study of the Arabic handwritten heritage, the development of methods for studying Arabic manuscripts, and their authorship based on the analysis of the content and special features and peculiarities of handwriting. (See, in particular, **Arabic Manuscripts Identification Based on the Feature Relation Graph**; as well as **Recent Dynamics in Arabic Machine Translation: Linguistic Approach; Integration of language processing and linguistic research as the mainstream in the Arabic studies**)

The use of methods of classical codicological and textological analysis based on large volumes of linguistic material in combination with objective tools of digital technologies allowed the authors to address a number of fundamental problems relevant not only for Arabic

and Islamic studies, but also for other areas of humanitarian knowledge. Among them the authorship attribution of a written document, and the degree of changes of the implicit formal indicators of a language and its stylistics in correlation with changes in the extra-linguistic context, for example, transformations in political and public life, which, for example, is studied in **Modeling and Visualization of Media in Arabic**.

The authors also focus on the relationship between language and religion, in particular the Arabic language of the Koran and Islam, and the role of the Arabic language in the modern world. (See: **Islamic Studies Today: New Role and Challenges**)

Using the technologies of digital analysis and modeling, the dialect paradigm of the Arab world was considered, which, in addition to its general theoretical value, is also important for solving applied and scientific problems, in particular, creation of a dialectal atlas of Arabic using digital technologies and opportunities offered by Internet, which is reflected in the works: **Dialectal Atlas of the Arab World - Between Intention And Reality**; and **Modern Trends in the Development of the Linguistic Situation in the Arab World**.

The authors have clearly demonstrated that the use of the methods of mathematical analysis not only increased the efficiency of humanitarian studies, for example, in the Arabic studies, but, in turn, their achievements may help to improve the architecture of various software applications, which is convincingly shown in such works as **Recent Dynamics in Arabic Machine Translation: Linguistic Approach**, as well as in **Linguistic and Islamic Studies in Historical Perspective: the Case of Interdisciplinary Communication**.

The presented works have both general theoretical and practical significance, and the stated results can be successfully used in the educational process. (See **ICT and a New Approach to Arabic Learning, Interdisciplinarity and Innovation: the Case of the Arabic Language Teaching and Research, Competency-Based Education: from Theory to Practice**).

Methodological foundations of the interdisciplinary approach and the peculiarities of their application in Arabic and Islamic studies are presented in **The Arabic Language Processing: Peculiarities of Interdisciplinary Research, Humanities and Mathematical Approaches in the Case of Arabic**.

By using classical methods of research combined with innovative technologies, the authors not only significantly enriched the prospects for solving a number of fundamental theoretical and practical problems in this and related fields, but also created the basis for further interdisciplinary research, made a serious contribution to the study of dialectical unity and the relationship between language and text, religion and society on the example of the Arab-Muslim civilization.