

Preface

The International conference “Linguistic Forum 2020: Language and Artificial Intelligence” took place in 2020 on November 12-14 in Moscow, Russia. The conference is organized by the Institute of Linguistics, Russian Academy of Sciences. This conference is part of a series of annual forums initiated by the Institute of Linguistics RAS in 2019.

The aim of the 2020 forum is to foster dialogue among researchers working at the interface of linguistics and artificial intelligence including those engaged in computational linguistics and natural language processing. Developments in AI have been responsible for recent advances in natural language generation and comprehension; they have also expanded the boundaries of these technologies’ applicability. Neural networks and dense embeddings have replaced models based on feature engineering and traditional discrete categories of linguistic analysis. As a result, the boundary between fundamental and applied linguistic research is being eroded. Empirical linguistics is taking on board these new technologies, in part, to enable better modelling of language and documentation of data. AI is also increasingly becoming a part of the everyday life of language users. Can fundamental linguistics currently offer technologically viable ideas or methods? These and similar conceptual and methodological problems were the focus of the forum.

Among the topics that would be of interest to discuss at the forum, the Program Committee highlights the following:

- Neural networks (and other machine learning methods) and the problems of their interpretability
- Language generation and comprehension: commonalities and differences
- Linguistic diversity and multilingualism as challenges for AI
- Discourse types: modes, genres, and styles
- Textual complexity and coherence
- Language in the context of multimodal communication
- Modelling individual differences in language
- Non-discrete phenomena in language
- Emerging and prospective linguistic technologies.

There were 101 submissions, 73 reports were accepted. All the papers reviewed by independent experts and members of the program committee. There are 4 plenary reports at the conference. More than 90 participants from China, Italy, Sweden, Great Britain, Germany, Canada, Belarus, many cities of Russia took part in the conference. The conference was held online. Abstracts of reports, presentations and video performances are posted on the conference website https://iling-ran.ru/web/en/conferences/2020_lingforum. For publication in the proceedings of the conference, 10 papers and 2 short papers reported in sections and 3 annotations of plenary reports were selected.

Valery Solovyev
Natalia Loukachevitch
Olga Lyashevskaya

Program Committee

- Andrej A. **Kibrik** (chairman) (Institute of Linguistics, Russian Academy of Sciences, Lomonosov Moscow State University)
- Aleksandrs **Berdicevskis** (University of Gothenburg (Göteborgs universitet))
- Pavel **Braslavski** (Ural Federal University, National Research University Higher School of Economics)
- Elena **Filatova** (CUNY)
- Eduard **Klyshinskiy** (National Research University Higher School of Economics)
- Artemy **Kotov** (National Research Center «Kurchatov Institute», Russian State University for the Humanities)
- Andrey **Kutuzov** (University of Oslo (Universitetet i Oslo))
- Sergei **Kuznetsov** (National Research University Higher School of Economics)
- Varvara **Logacheva** (Skolkovo Institute of Science and Technology)
- Natalia **Loukachevitch** (Lomonosov Moscow State University)
- Olga **Lyashevskaya** (National Research University Higher School of Economics, V.V. Vinogradov Russian Language Institute of the Russian Academy of Sciences)
- Dmitry **Muromtsev** (ITMO University)
- Boris **Orekhov** (National Research University Higher School of Economics)
- † Gennady **Osipov** (Federal Research Center "Computer Science and Control" of the Russian Academy of Sciences, Russian Association for Artificial Intelligence)
- Nadezhda **Riabtseva** (Institute of Linguistics, Russian Academy of Sciences)
- Vladimir **Salimovsky** (Perm State University)
- Vladimir **Selegey** (ABBYY, Moscow Institute of Physics and Technology)
- Sergei **Sharov** (University of Leeds)
- Ivan **Smirnov** (Institute of Artificial Intelligence Research, FRC CSC of the Russian Academy of Sciences)
- Valery **Solovyev** (Kazan Federal University)
- David **Talbot** (Yandex)

Organizing Committee

- Andrey **Shluinsky** (chairman)
- Natalia **Artamonova**
- Vadim **Dyachkov**
- Valentin **Gusev**
- Dmitry **Kolomatskiy**
- Olga **Orlova**
- Ekaterina **Oschepkova**
- Konstantin **Polivanov**
- Tamara **Storozhenko**
- Dmitry **Zalmanov**