This special issue is devoted to current directions in cognitive development research and theory. In addition to classic topics of interest on cognitive development (e.g., perception, attention, language and memory), the past years have seen an emergence of several new research directions in cognitive development (e.g., social learning, pragmatical aspects of language development, selective learning). In terms of methodology, this special issue brings together work from behavioural testing, intelligence testing, eye tracking and neuroimaging.

Liashenko, Khalezov and Arsalidou present a history of intelligence testing and domain specific Olympiads and discuss advantages and limitations of methods of detecting cognitively gifted children. They underline the contribution that functional neuroimaging can make to our knowledge of cognitively gifted individuals and highlight the need for further work in the area.

Korneev, Matveeva and Akhutina examine, using eye tracking, early stages of learning silent reading in the Russian language. They show that 6-9 year olds with low scores on visual and visual-spatial processing generated more and longer fixations. The relation between language and visual-spatial environment is also studied by Osina and Saylor; they investigate infants’ ability to use intonation to interpret ambiguous requests for objects. They show that infants at twenty-months are more likely to select a new rather than the old object for the experimenter in response to an excited request, whereas infants at sixteen-months select new and old objects at chance.

Language as a form of social communication was studied by Kotov, Vlasova and Kotova who show that three years olds learn new words better when they hear words within a constant (same adult communication context) rather than when they heard the
words in a non-constant (a new adult joined the conversation) communication context. This effect was not present in 4-year-olds, who learn new words in both constant and non-constant conditions, suggesting that social context affects language learning only in some circumstances. Social learning is also critical for learning empathy in toddlerhood, as shown by Yudina and Kotova, who find that a negative emotional experience (i.e., not finding a toy) does not influence empathic behavior of toddlers, whereas viewing an adult model of comforting act increases the rate of empathic acts in toddlers.

The first years of life are a fascinating period of development and the listed studies in this special issue showcase some of the mechanisms of variability across development. Theoretically, knowledge from these studies can inform theories of cognitive, linguistic and social development. We hope that you enjoy this special issue on cognitive development and that it inspires you in new directions of research.

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