Puzzles in Mathematics Education

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Puzzles emerge at the dawn of history, revealing something intrinsic about human thinking. As such, they have allowed us to play with reality in clever and ingenious forms, from riddles to mathematical games such as Archimedes’ loculi. Significantly, puzzles have often been the source of new ideas in mathematics, leading to the establishment of new fields and branches. Given their exploratory nature, it is not surprising to find that puzzles were at the core of mathematics education in antiquity. An early math textbook, called the Ahmes Papyrus (1650 BCE), is a case-in-point. It contains challenging puzzles that were apparently intended for the education of Egyptian youth. Similar texts exist across the ancient world. Clearly, puzzles were perceived as intrinsic to mathematics and how it is learned. Today, it is rare to find entire courses and curricula that revolve around puzzles in a similar way. Typically, puzzles are used as ancillary devices in the production of learning materials and in curricula, not as the core of math pedagogy. This book argues that putting puzzles at the center of math curricula, as was the case in antiquity, will enhance learning outcomes in all types of students. The book describes the classic math puzzles, deconstructing their psychological features, so that their pedagogical value can be examined concretely.

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This monograph is NOT about teaching - it's about EFFECTIVE LEARNING from a perspective that leads to an entirely new form of learning and language acquisition involving transformational discovery, mentorship and interpretation.

Its roots are as old as Socrates. Linguists, biologists, anatomists, psychologists, sociologists and physicians in the tradition of the “German School” of learning have contributed over the centuries to what is now nothing less than a revolution in learning, and the “business of teaching.”

In this volume, the author has drawn from contemporary clinical and experimental data beginning with effective dramatic learning to develop a Neurobiological theory of language, including methodology and tenets. When applied in a traditional language classroom setting, the results have been nothing short of miraculous.

With its focus on language acquisition and learning, this monograph is a treasure-trove of new information for educators, linguists, “teachers,” tutors, psychologists, physicians and researchers interested in transforming a field that has remained in the “dark ages” for too long.

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Language acquisition: meaning across contexts

Mikolaj Deckert and Iwona Witzczak-Płisiecka

Using the principles and methods of cognitive linguistics, pragmatics as well as corpus linguistics, this volume offers insights into how contextualised language use condition the meaning-making process. A total of ten contributors draw from English, Greek, German, Hungarian, Latin, Polish, Russian and Ukrainian to examine different types of linguistic evidence ranging from academic discourse, to literature, church language as well as media language. While the papers employ a choice of analytic constructs and research methodologies, they share the central objective of uncovering, systematically describing and illustrating some of the patterns of language-promoted meaning construction and communication both intralinguistically and in a comparative perspective.

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Mikolaj Deckert and Iwona Witzczak-Płisiecka: Language and cognition: meaning across contexts

Marco Venuti: Institutional academic discourse in European university websites. Internationalisation and marketisation in the European higher education area

Isabela Więsniwska-Kędzora: Prefabs in preaching

Dorota Piurszynska: Using corpus tools to study textual meaning and to discriminate among literary text types

Jacek Tadeusz Walitski: Semantic shifts from space to time in motion-mediated language

Marcin Gregiak: Affirmation as a DISTANCE relation

Ewa Wychorska: A holistic approach to cognition, metaphors, dreams and emotions

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Andrej Levitsky: East Slavic and West Germanic sleep in the quasi-reality dimension

Jadwiga Suwaj: Are translations of English titles localized for the Polish audience?

Katalin Szilé: The dialogue of words across languages


Topology and Cognition

What Image-schemas Reveal about the Multidimensional Language of Emotions

M. Sandra Peña Cervel

Neuroanatomy

The brain as cognitive tool

The brain is a cognitive tool that enables us to build and process information. It is the device used in order to enhance poetic language and metaphor. The assumption that metaphor is a linguistic device used in order to enhance poetic language, on the other hand, is argued that the cognitive theory of metaphor assigns metaphor a central role in language and thought. Within this framework it is also postulated that metaphor does in fact account for a large portion of what we both know and think, not to mention what we even feel and do in our daily lives. Additionally, an overview of the idea of metaphorism as opposed to objectivism is given and special emphasis is placed on metaphor as a kind of idealized sense of the real.

Chapter 3, another structuring principle, image-schemas, is developed by offering a lengthy description of its characteristics and nature. An alternative proposal for a taxonomy of image-schemas is made after a discussion of the main inadequacies of existing hierarchies of such constructs. By specifying the general theoretical framework and the amount of departure, the ground is prepared for the analysis of the corpus and the presentation of the data derived from it in chapters 4, 5, 6, and 7. Finally, chapter 8 offers some concluding remarks.

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Language-Cognition Interface: State of the Art

Ramesh Kumar Mishra & Narayanam Sripravati (eds.)

Centre for Behavioural and Cognitive Science (CBCS), University of Allahabad

This book is not only addressed to the most significant volume is the emphasis on multi-disciplinary appro-aches and cross-cultural emphasis. The volume focuses on the attraction to research to researchers who wish to compare studies across languages and cultural boundaries. The book offers rich evidence of how to present substantially the main arguments and research themes as well as methodological issues in a wider range of language-cognition research to a wider audience in linguistics, psychology, neuropsychology, and cognitive science.

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Falk Huettel: The role of color during language-cognition interactions

Patrick Sturt: The psycholinguistics of structural composition

Kirsten M. Tooley & Matthew Traxler: Syntactic Priming in Comprehension: A Dual Mechanism Account

Paschal Gygas & Ute Gabriel: Gender identity in language: More than meets the eye

Ramesh Mishra: Language-cognition interface: Issues and prospects

Bhoomika Kar, Vatsala Khare and Tanya Das: Bilingualism and Cognitive Control: Is Bilingualism a Cognitive Advantage

D. Vasant: Verbs of Motion and Language Cognition: Reflections on Research Frameworks

Priti Chanda: Redundant Agreement, Phases and Memory

Rick Dale, Nicholas D. Duran, & Jennifer