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Titolo	On the Logos: A Naïve View on Ordinary Reasoning and Fuzzy Logic // by Enric Trillas
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Collana	Studies in Fuzziness and Soft Computing, , 1434-9922 ; ; 354
Disciplina	511.3
Soggetti	Computational intelligence Artificial intelligence Logic, Symbolic and mathematical Cognitive psychology Logic Computational Intelligence Artificial Intelligence Mathematical Logic and Foundations Cognitive Psychology
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Meaning as a Quantity -- Antonyms, Negation, and the Fuzzy Case -- 'And', and 'Or' in Language. The case with Fuzzy Sets -- A First Look at Conditional Statements -- Linguistic Qualification, and Synonymy -- Thinking, Analogy, and Reasoning -- A (Naïve) Symbolic Model of Ordinary Reasoning -- A Glance at Analogy -- A Glance at Creative Reasoning -- Formal Reasoning with Precise Words -- Formal Reasoning with Imprecise Words -- A Few Questions on the Reasoning of Quantum Physics -- Questions on Uncertain, Possible, and Probable -- Questions on Domesticating and Controlling Analogy -- Questions on the Classical Schemes of Inference -- Questions on the Fuzzy Schemes of Inference -- Questions on Monotony -- Questions on 'Not Covered by P' -- Questions on 'Sorites' in Ordinary Reasoning -- A Few Questions on Naming Concepts -- Instead of a Conclusion -- To End Up. .

This book offers an inspiring and naïve view on language and reasoning. It presents a new approach to ordinary reasoning that follows the author's former work on fuzzy logic. Starting from a pragmatic scientific view on meaning as a quantity, and the common sense reasoning from a primitive notion of inference, which is shared by both laypeople and experts, the book shows how this can evolve, through the addition of more and more suppositions, into various formal and specialized modes of precise, imprecise, and approximate reasoning. The logos are intended here as a synonym for rationality, which is usually shown by the processes of questioning, guessing, telling, and computing. Written in a discursive style and without too many technicalities, the book presents a number of reflections on the study of reasoning, together with a new perspective on fuzzy logic and Zadeh's "computing with words" grounded in both language and reasoning. It also highlights some mathematical developments supporting this view. Lastly, it addresses a series of questions aimed at fostering new discussions and future research into this topic. All in all, this book represents an inspiring read for professors and researchers in computer science, and fuzzy logic in particular, as well as for psychologists, linguists and philosophers.
