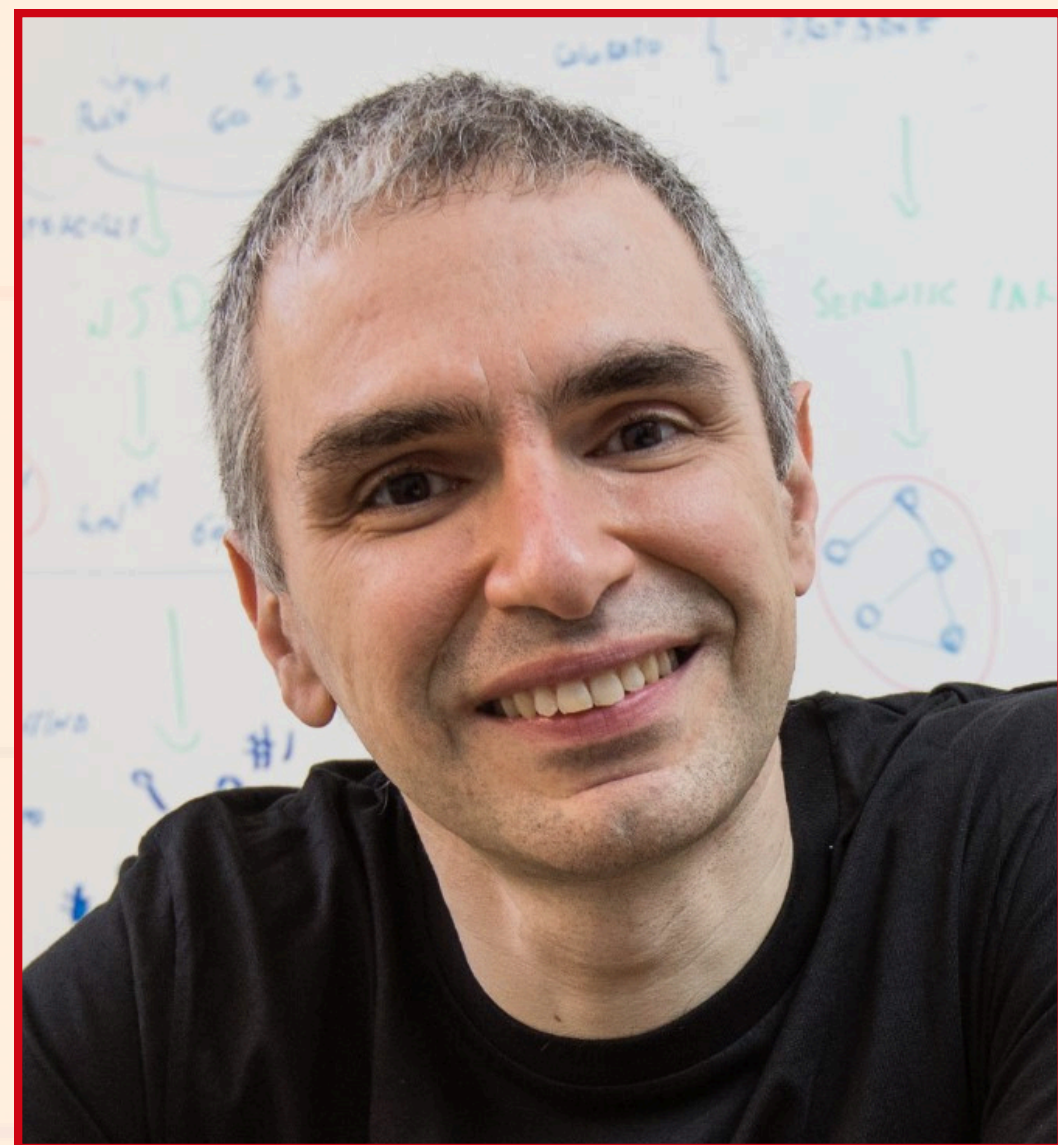




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ROBERTO NAVIGLI

From Semantics to Large Language Models... and Back Again: Lessons from BabelNet and ChatMinerva



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Blocco Aule S. Murialdo**

ABSTRACT:

Over the past two decades, AI has moved from explicit representations of meaning and knowledge to increasingly powerful Large Language Models (LLMs) capable of remarkable generalization. Yet many of the challenges that motivated computational semantics in the first place, i.e. multilinguality, grounding, interpretability, reliability, and controlled access to structured knowledge, remain highly relevant in the LLM era. In this talk, I will revisit this evolution through the lens of BabelNet, the Italian LLM Minerva, and its AI assistant ChatMinerva, highlighting what we have learned from building large-scale semantic resources and generative AI systems. I will argue that the future is not simply about replacing symbolic semantics with LLMs, but about bringing meaning, knowledge, and reasoning back into the design of next-generation AI.



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