► GIOVANNI SAMBIN, Two principles of dynamic constructivism.

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In an evolutionary view, all of mathematics is produced by humanity through a dynamic process of abstraction [2]. Then, instead of reducing all notions to one or just a few, one needs a foundational theory which is maximal in its capacity of conceptual distinctions, and thus minimalist in its assumptions [1]. The relevance for mathematics of our minimalist foundation has been illustrated in [3, 4].

Since our foundation can keep real and ideal aspects of mathematics distinct, they should obey two principles: one hand real aspects have to always admit a computational interpretation, and on the other hand ideal aspects have to be conservative over the real ones [5]. We will discuss the impact of these two methodological principles on philosophy of mathematics and of computing science.

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