Abstract: While computation is generally considered as a utilitarian solution (problem solving), it also has great potential toward more open-ended goals. From the earliest pioneers, computation has been proposed as a method of research to uncover and understand causal relations of complex, adaptive and creative systems, such as market circulation, ecosystems and many aspects of living organisms. In this talk, we will introduce and distinguish notions of open versus closed systems and worlds, and infinite versus finite games. We will demonstrate our own sequential creative processes to construct open worlds as infinite games - using the art work series ‘Artificial Nature’ as a vessel - and describe systematic and implementation details from early prototypes to more recent developments.

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