A new book on microbial symbionts by Marc-André SELOSSE was published on June 14th, by the French publisher Actes Sud. It is entitled:

**‘Never alone. These microbes that are building plants, animals and civilizations.’**

It’s a book on microbial symbioses, explaining the raising discovery that microbes are numerous and hidden within plants and animals. Beyond pathogenic microbes, these symbiotic microbes represent a fraction that is living in healthy organisms and help them to function normally each day – namely, they give help for digestions, protection, development and even reproduction. Even photosynthesis, in plants, or respiration, in animals, are processes due to intracellular bacteria! The book includes the human microbiota, e.g. in the digestive tract, which is so crucial for health and impacts our behavior and mood, but also our diverse and helpful skin microbiota. The impact of these symbioses in ecosystem shaping, and their impact (no less!) on climate and atmosphere composition is underlined. The way our civilization also used microbes to prepare food and protect ourselves is also described, mirroring in cultural evolution our biological evolution.

All is based on a dense set of short stories and funny facts, in a narrative way, with a drop of humor, to progressively construct the conclusion that we are living in (and from) a world of microbes, and that, beyond negative interactions (competition, predation, parasitism), cooperative, mutualistic interactions also contribute to life and its evolution. It is ending, in the conclusion, with proposal for a new view of life for citizens and… scientists !

A set of 8 videos on the book (in French) can be found [HERE.](https://www.youtube.com/playlist?list=PLdSD7JY_HGxl3f-GBeKOb8AkeYw5Nardl) See also [*https://twitter.com/NewPhyt/status/875642899077021696*](https://twitter.com/NewPhyt/status/875642899077021696)

