

Profession of Faith

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All my carrier, up to now, was done in section 02. I was recruited as an experimentalist/modeler in the Non-Linear community, historically located in this commission. After being educated on instabilities (Faraday), I quickly moved to granular material (convection, faraday waves, avalanches), and bumped into biological morphogenetic problem, that of Phyllotaxis (position of leaves).

This problem was very much in the prolongation of the dynamical systems theory, as we took it as an iteration function problem (where to put the new leaf). It started my passion for understanding morphogenesis, mainly biological - botanical, in a physical way, as essentially of problem of instability of growth. Compared to physical instabilities, the biological reproducibility can then come from the control of the evolutions of the parameters and of the boundary conditions. This morphogenesis optic was also applied to geophysical objects, as the sand dunes, or sociological, as city maps.

It was proposed to me to move in section 05, but I remained up to now loyal to section 02. But I was early on at the Physical/biological interface. I formed many students that were at the interface, and their main hope of recruitment was then the interdisciplinary commissions. I was also a member of an interdisciplinary commission, but the CID 42 "Sciences de la communication" (2008-2012), with also historians. This fully interdisciplinary experience was very enriching. I also helped in the formation of the new MSC Laboratory, which aim was to regroup dispersed and isolated scientists, in particular into a "non-linear" group, and a physical/biological interface group.

I can only rejoice at the creation of this new section 08, which groups all my interests, and regroup all these communities, in particular offering a dedicated permanent section for the physic of living matter, and its recognition by several institutes. In this section I want to support the diversity of themes and approaches, as well as cursus, as I believe as diverse as possible ecosystem is essential for a global and continuous development of science and scientists. I am worried by the decrease of number of positions which induces an increase on the requirements to be candidate.