

[GUEX Jean](#)

Involution croissante et Règle de Cope

Increasing involution and Cope's Rule

In this paper, we demonstrate that Cope's rule merely describes the particular case where volume increase is strictly coupled with the linear dimension of the organisms. Allometries which are frequently observed in the evolution of the organisms' morphology mean that their size, volume and surface can vary independently. The consequences of this can be summarized as follows. Volume increase not coupled with an increase of the linear dimension of the organisms generates increasing involution and/or elongation in shelly cephalopods, forams and radiolarians. Increasing of the biomineralizing surface not coupled with volume increase generates increasing complexity in the sutures and growth lines in ammonites and an increase in the complexity and number of chambers in forams.

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