Review of: "Reaction rate view on autocatalysis"

Massimo Frittelli[1]

1 University Of Salento

Potential competing interests: The author(s) declared that no potential competing interests exist.

The author considers a three step Landolt reaction to show that, in the case of multistep reactions, the identification of autocatalysis requires more care than in the single-step case. Specifically, the multi-step reaction can exhibit autocatalysis even if the individual reaction steps are not autocatalytic. In this regard, some reviewers have objected that, due to the presence of other species, the concentration of C cannot be considered as an independent variable, which means that the process cannot be called autocatalytic even if the rate of formation of C can increase with C itself. On the other hand, if an initial condition for A,B,C is given, then it is possible to regard the evolution of A and B as intermediate mechanism through which C auto-catalyses, which is the author's point of view.
It might be helpful to provide a real life example -if available- where the presence of intermediate reactants is actively used to induce autocatalysis. This would help clear out the debate.