

# Comments on R&D-based Growth in the Post-modern Era

- Very interesting paper and very elegant way of modeling!
- Stone-age R&D? Is this relevant for the outline of the paper?
- Stagnation caused by  $e_t = 0$  implies  $g_A = n_t^{\frac{1-\nu}{1-\phi}} - 1$  (Jones, 1995).  
This result is compatible with skilled and unskilled labor which raises the question: how to model human capital?
  - R&D with skilled and unskilled labor (Schäfer, 2007/2010).
  - Is it possible to keep research output constant in a society confronted with  $n_t < 1$ ? Is there a minimum population size?

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- Linearity of  $h_{t+1}$  with respect to  $h_t$ . Are results more interesting, if human capital is concave in  $e$ ? - as suggested by micro evidence, see also de la Croix and Doepke; Glomm Ravikumar, i.e.

$$h_{t+1} = (\theta + e_t)^\eta h_t^\tau \bar{h}_t^{1-\tau}.$$

- Improper oscillations caused by  $A_t$ ? Why is the transition of the population non-monotonous?
- Policy implications? Public schooling would at least mitigate the quality-quantity trade-off (de la Croix and Doepke) - does not affect the paper.