

Humans grow at a uniquely slow pace compared with other mammals. When and where did this schedule evolve? Have technological advances, farming and cities had any effect upon it?

Addressing these and other key questions in palaeoanthropology and bioarchaeology, Simon Hillson examines the unique role of teeth in preserving detailed microscopic records of development throughout childhood and into adulthood. The text critically reviews theory, assumptions, methods and literature, providing the dental histology background to anthropological studies of both growth rate and growth disruption. Chapters also examine existing studies of growth rate in the context of human evolution and primate development more generally, together with implications for life history. The final chapters consider how defects in the tooth development sequence shed light on the consequences of biological and social transitions, contributing to our understanding of the evolution of modern human development and cognition.

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Cover illustration (front): scanning electron microscope image of a developing human lower incisor. The root is still growing and, because the tooth was unerupted, the crown shows no wear, so sharply defined perikymata are visible on its surface; (back): higher magnification view of a large defect of enamel hypoplasia. Images courtesy of Simon Hillson.

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