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THE COVER

The developmental paths of the human eye — shown on the cover in a colored scanning electron micrograph during the eighth week of gestation — and the octopus eye are examples of convergent evolution. Although formed by entirely different processes and having somewhat different functions, they are remarkably similar. In “Development Influences Evolution” (pages 220-227), evolutionary developmental the course of evolution. In a larger sense, developmental constraints on evolution are the reason that every life form on Earth can be lumped into one of 35 different body plans. All of which originated in the Cambrian }period about 500 million years ago. Known by its practitioners as evo-devo, the study of such interactions is helping science to understand why life has adopted so many variations. (photograph by SPL/Photo Researchers Inc.)