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Nota di contenuto	Part 1. Orthogenesis: a history Chapter 1. The sources. Formation of the concept of directed evolution in the 19th century Chapter 2. Evolutionary biology at the turn of the 20th century. New concepts of directed evolution in the 1900-1930s Chapter 3. Declarations in favour of orthogenesis in the 1900-1930s Chapter 4. Orthogenesis and the modern evolutionary synthesis Chapter 5. New concepts of directed evolution in the recent history of evolutionary biology Chapter 6. Statements in support of orthogenesis in the 1950s and later Part 2. Orthogenesis: Pro et Contra Chapter 7. "Laws" in biology Chapter 8. Species senescence Chapter 9. Adaptation or non-adaptation? Chapter 10. Anticipation, parallelisms and convergences Chapter 11. Constraints on variation Chapter 12. Direct impact of the environment on evolution and the inheritance of acquired characteristics Chapter 13. Mystics or unrealised synthesis? Chapter 14. Conclusion.
Sommario/riassunto	This book reviews the convoluted history of orthogenesis with an

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emphasis of non-English sources, untangles relationships between various concepts of directed evolution and argues whether orthogenesis has something to offer modern biology. Darwinism claims that evolution occurs by selection from an extensive random variability. An alternative viewpoint—that the material for variability is limited and organisms are predisposed to vary in certain directions—is the essence of evolutionary concepts that can be grouped together under the name of orthogenesis. Dating back to Lamarck, orthogenesis has existed in many guises. Branded as mystical and discarded as unscientific, it keeps re-emerging in evolutionary discussions.