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Nota di contenuto	Cover; THE CONTINENTAL DRIFT CONTROVERSY; Dedication; Title; Copyright; Contents; Foreword; Acknowledgements; Abbreviations; Introduction; Notes; 1: How the mobilism debate was structured; 1.1 The three phases of the continental drift controversy; 1.2 Solutions, theories, hypotheses, and ideas or concepts; 1.3 Problems and difficulties; 1.4 First and second stage problems; 1.5 Four examples of first stage problems; 1.6 Four examples of second stage problems; 1.7 Difficulties; 1.8 Unreliability difficulties; 1.9 Anomaly difficulties; 1.10 Missing-data difficulties 1.11 Theoretical difficulties 1.12 Difficulty-free solutions; 1.13 The three research strategies and how they gave structure to the debate; 1.14 Specialization and regionalism in the Earth sciences; 1.15 Why regionalism and specialization affected theory preference during the mobilist debate; Notes; 2: Wegener and Taylor develop their theories of

continental drift; 2.1 Introduction; 2.2 Geological theorizing at the turn of the twentieth century; 2.3 The contractionism of Suess; 2.4 The reception of Suess' contractionism and the difficulties it encountered; 2.5 Wegener the man
2.6 Wegener's 1912 theory of partition and horizontal displacement of continents, from idea to working hypothesis
2.7 Wegener presents and defends his drift theory in 1912: his six major arguments; 2.8 Wegener's further arguments in 1912; 2.9 Taylor and his career; 2.10 The emergence of Taylor's theory of creep and horizontal displacement; 2.11 Taylor's cosmogony and his notion of continental drift, 1898; 2.12 Taylor's 1910 presentation and defense of his creep and drift theory; 2.13 Wegener and Taylor: the independence of their inspiration; 2.14 Wegener and Taylor compared
2.15 Evolution of Wegener's theory, 1912-1922
Notes; 3: Sub-controversies in the drift debate: 1920s-1950s; 3.1 Introduction; 3.2 Wegener's theory as presented in 1922; 3.3 Biotic disjuncts and Wegener's 1922 explanation of them; 3.4 Landbridgers revise and rebut; 3.5 Mobilists rally increasing support for continental drift; 3.6 The resurgence of American permanentism: isthmian links; 3.7 Du Toit, Simpson, and Longwell debate; 3.8 Support for permanentism continues through the mid-1950s; 3.9 Questioning reliability and completeness of the biogeographical record
3.10 Permo-Carboniferous glaciation: Wegener's 1922 solution
key support for Wegener; 3.11 Permo-Carboniferous glaciation: fixists attack Wegener's solution and refurbish their own; 3.12 Permo-Carboniferous glaciation: mobilists counterattack; 3.13 The geodetic sub-controversy over the westward drift of Greenland; 3.14 Use of research strategies in the three sub-controversies; 3.15 Koppen and Wegener determine ancient latitudes; Notes; 4: The mechanism sub-controversy: 1921-1951; 4.1 Introduction; 4.2 Wegener's 1922 mechanism; 4.3 Wegener's mechanism attacked: 1921 through 1926
4.4 Van der Gracht modifies Wegener's mechanism

Sommario/riassunto

Resolution of the sixty year debate over continental drift, culminating in the triumph of plate tectonics, changed the very fabric of Earth science. This four-volume treatise on the continental drift controversy is the first complete history of the origin, debate and gradual acceptance of this revolutionary theory. Based on extensive interviews, archival papers and original works, Frankel weaves together the lives and work of the scientists involved, producing an accessible narrative for scientists and non-scientists alike. This first volume covers the period in the early 1900s when Wegener first pointed out that the Earth's major landmasses could be fitted together like a jigsaw and went on to propose that the continents had once been joined together in a single landmass, which he named Pangaea. It describes the reception of Wegener's theory as it splintered into sub-controversies and geoscientists became divided between the 'fixists' and 'mobilists'.
