

FROM TERRESTRIAL MAGNETISM TO GEOMAGNETISM: DISCIPLINARY TRANSFORMATION IN THE TWENTIETH CENTURY

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In 1900, researchers interested in Earth's magnetism generally proclaimed all facets of magnetic phenomena to be within their purview. Most such researchers referred to themselves as magneticians first and physicists or geologists second. After World War Two, a process of specialization began. Three distinct research areas appeared over several decades: the geodynamo theory and phenomena at the core-mantle boundary, paleomagnetism and its growing connection to geology, and electromagnetic phenomena of the upper atmosphere and near space. The former unity dissolved and the field fragmented. One result of fragmentation has been a loss of memory and a consequent misinterpretation of an important part of the history of geoscience. This presentation relates the challenges of recovering a history obscured by later events.