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Autore	Hopf, Heinz
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Nota di contenuto	These notes consist of two parts: 1) Selected Topics in Geometry, New York University 1946, Notes by Peter Lax. 2) Lectures on Differential Geometry in the Large, Stanford University 1956, Notes by J. W. Gray. They are reproduced here with no essential change. Heinz Hopf was a mathematician who recognized important mathematical ideas and new mathematical phenomena through special cases. In the simplest background the central idea or the difficulty of a problem usually becomes crystal clear. Doing geometry in this fashion is a joy. Hopf's great insight allows this approach to lead to serious mathematics, for most of the topics in these notes have become the starting-points of important further developments. I will try to mention a few. It is clear from these notes that Hopf laid the emphasis on polyhedral differential geometry. Most of the results in smooth differential geometry have polyhedral counterparts, whose understanding is both important and challenging. Among recent works I wish to mention those of Robert Connelly on rigidity, which is very much in the spirit of these notes (cf. R. Connelly, Conjectures and open questions in rigidity, Proceedings of International Congress of Mathematicians, Helsinki 1978, vol. 1, 407-414) • A theory of area and volume of rectilinear polyhedra based on decompositions originated with Bolyai and Gauss.

