boundaries do not satisfy the relevant curvature conditions. Solutions with infinite boundary data are also considered. This sometimes produces interesting generalizations of one of Scherk's classical minimal surfaces.

The final chapter of this book is devoted to extensions of the theorem of S. Bernstein that a function $z = f(x, y)$ satisfying the minimal surface equation and defined for all (x, y) in $\mathbf{R}^2$ must be affine. The corresponding theorem for functions f: $\mathbf{R}^n \to \mathbf{R}$ is true when $n = 3, 4, 5, 6, 7$ and fails for larger n.

As indicated above, this book leads one near the frontiers of knowledge in the study of oriented area-minimizing hypersurfaces. Much more remains to be done. For example, we know very little about the structure of singularities—not even if they necessarily have integer dimensions or whether or not they can persist under small boundary deformations.

REFERENCES

[AA] W. K. Allard and F. Almgren, eds., *Geometric measure theory and minimal surfaces*, Proc. Sympos. Pure Math., vol. 44, Amer. Math. Soc., Providence, R. I., 1986.

[FH] H. Federer, *Geometric measure theory*, Springer-Verlag, Berlin, Heidelberg, New York, 1969.

[FF] H. Federer and W. H. Fleming, *Normal and integral currents*, Ann. of Math. **72** (1960), 458–520.

[NJ] J. C. C. Nitsche, *Vorlesungen über Minimal Flächen*, Springer-Verlag, Berlin, Heidelberg, New York, 1975.

[OR] R. Osserman, *A survey of minimal surfaces*, Dover Publications, Inc., 1986.

[RE] E. R. Reifenberg, *Solution of the Plateau Problem for m-dimensional surfaces of varying topological type*, Acta Mathematica **104** (1960), 1–92.

[SL] L. Simon, *Asymptotics for a class of non-linear evolution equations, with applications to geometric problems*, Ann. of Math. **118** (1983), 525–571.

[W1] B. White, *Existence of least area mappings of N-dimensional domains*, Ann. of Math. **18** (1983), 179–185.

[W2] B. White, *Mappings that minimize area in their homotopy classes*, J. Differential Geom. **20** (1984), 433–446.

F. ALMGREN

BULLETIN (New Series) OF THE
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Distribution of values of holomorphic mappings, by B. V. Shabat, translated from Russian by James R. King. Translations of Mathematical Monographs, vol. 61, American Mathematical Society, Providence, R. I., 1985, v + 225 pp., $79.00. ISBN 0-8218-4514-4

Value distribution theory has known alternating periods of quiescence and rapid progress: the classical function-theoretic work of Nevanlinna, Ahlfors' introduction of differential-geometric methods, the work of Stoll, and the work of the Griffiths school, motivated by problems in algebraic geometry.