By what we learned about the author and his book, we of course wish we could have had the opportunity to talk with him before we wrote the first two chapters in [3] and he wrote his nine chapters plus two appendices.

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BULLETIN (New Series) OF THE
AMERICAN MATHEMATICAL SOCIETY
Volume 17, Number 2, October 1987
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0273-0979/87 $1.00 + $.25 per page

Potential theory, an analytic and probabilistic approach to balayage, by J. Bliedtner and W. Hansen, Springer-Verlag, Berlin, Heidelberg, New York and Tokyo, 1986, xi + 434 pp., $40.00. ISBN 0-387-16396-4

Potential theory and probability theory began a symbiosis in the 1940s and 1950s which continues to yield some of the deepest insights into the two subjects. On the surface, they seem quite dissimilar; fundamentally, certain aspects are identical.

The genesis of modern potential theory was H. Cartan's investigation of Newtonian potential theory in the 1940s. If μ is a distribution in R^3, then the potential generated by μ is the function $U\mu(x) = \int |x - y|^{-1}\mu(dy)$. Some hint of the richness of this class of potentials rests in the observation that every positive superharmonic function in R^3 can be represented as the sum of a positive constant and the potential of a positive measure μ. This collection **S** of superharmonic functions is the potential cone of Newtonian potential theory: it is closed under addition and scalar multiplication, and the minimum of two functions in **S** is again in **S**.

Many of the problems of potential theory are rooted in the problems of electrostatics in the classical case. Place a unit charge on a conductor B in R^3. The electrons will rush to the skin of B and assume an equilibrium distribution π so that the potential $U\pi(x)$ of this distribution is constant for x in the interior of B. We can obtain $U\pi(x)$ from **S** as follows. Let $f = \inf\{g \in \mathbf{S}: g \geqslant 1 \text{ on } B\}$. There is a unique element $U\gamma$ in **S** which agrees with f almost everywhere. The total mass of γ is called the Newtonian capacity of the