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On some boundary properties of homeomorphisms. (Russian) [\[Zbl 0801.30020\]](#)

Lavrent'ev, M. M. (ed.), Mathematical analysis and discrete mathematics. Interuniversity collection of scientific works. Novosibirsk: Novosibirskij Gosudarstvennyj Universitet, 34-38 (1989).

The author studies homeomorphisms $f : B^n \rightarrow B^n$, $n \geq 2$, where B^n is the unit ball of \mathbb{R}^n with the following properties: (1) f and f^{-1} are in the class ACL^n , (2) at each boundary point $p \in \partial B^n$, the inner dilatation of f satisfies some integral conditions. He then proves that f has a homeomorphic extension to the closure of the ball. The same problem for quasiconformal maps under different assumptions has been studied by R. Näkki in his thesis in 1970. The basic properties of ACL^n maps were proved in the books of J. Leong-Ferrand (1955) and G. D. Suvorov (1965 and 1985).

For the entire collection see [\[Zbl 0787.00010\]](#).

Reviewer: [M.Vuorinen \(Helsinki\)](#)

MSC:

[30C65](#) Quasiconformal mappings in \mathbb{R}^n , other generalizations

Keywords:

[Dirichlet integral](#); [boundary behavior](#)