The mean value property characterizes continuous harmonic functions, and it is natural to wonder if \( p \)-harmonic functions have analogous statistical descriptions. Some basic calculations suggest that a continuous function \( u \) is \( p \)-harmonic in \( \Omega \) if and only if
\[
  u(x) = (2 - p) \text{median} \{ u(s) \} + (p - 1) \text{mean} \{ u(s) \}
\]
at each \( x \in \Omega \), where \( s \in \partial B(x, r) \) and \( B(x, r) \subseteq \Omega \). We will report on ongoing work on these ideas and their applications. (Received September 22, 2009)